



TAMPEREEN TEKNILLINEN YLIOPISTO
TAMPERE UNIVERSITY OF TECHNOLOGY

MARJAANA PUTRO
DELIVERY SERVICE CONCEPT DEVELOPMENT FOR C2C
MARKETPLACE WITH LEAN STARTUP PRINCIPLES
Master of Science thesis

Examiner:
Associate Professor Nina Helander
Examiner and the topic approved at
the Faculty of Business and Built
Environment Council meeting on the
3rd of February 2016

ABSTRACT

MARJAANA PUTRO: Delivery Service Concept Development for C2C Marketplace with Lean Startup Principles

Tampere University of Technology

Master of Science Thesis, 117 pages, 2 Appendix pages

March 2016

Master's Degree Program in Information Management

Major: Logistics, Transportation, and Information

Examiner: Associate Professor Nina Helander

Keywords: Lean startup, C2C, e-commerce, consumer marketplace, services, consumer logistics

Information technology has led to a significant growth of e-commerce and consumer-to-consumer marketplaces in the recent years. This has created new business possibilities along with the increasing importance of services in modern society. The current service models are renewing and reshaping in different industries, logistics and home deliveries among one of them. In consumer logistics one of the most critical steps is the last part of the delivery, and different type of solutions try to solve this so called last mile issue. However, there are no established practices, especially what it comes to the combination of services and logistics with consumer-to-consumer marketplaces.

The research focuses on these areas of development and examines how to create a consumer-based distribution service concept for a consumer-to-consumer marketplace. A case company for the study is Finland's leading consumer marketplace *Tori.fi*, owned by Schibsted Media Group.

The research approaches the issue with a methodology of lean startup, which provides a set of practices for creating new products or services under conditions of extreme uncertainty. It is a business development method that brings lean manufacturing and agile development principles into an innovation process. In the study lean startup adaptation includes a preparation stage, workshop, mobile web experiment, ten consumer interviews, and learning in different stages of the process. The essential development tools utilized were personas, lean canvases, and an experiment loop tool. The workshop examined a concept that could minimize the marketplace selling effort. In the experimented solution multiple products could be picked up from the seller's home door, and prized, sorted, and sold for them. Seller behavior and needs were then analyzed further with consumer interviews.

The lean startup development process, and the analyses and frameworks made base on it, cover the results of the study. The most important findings are the efforts to understand the C2C seller needs and more systematic alignment of C2C with services, and lean startup usage in the academic research.

TIIVISTELMÄ

MARJAANA PUTRO: Kuluttajamarkkinapaikan jakelupalvelukonseptin kehittäminen lean startup -periaatteiden mukaisesti
Tampereen teknillinen yliopisto
Diplomityö, 117 sivua, 2 liitesivua
Maaliskuu 2016
Tietotojohtamisen diplomi-insinöörin tutkinto-ohjelma
Pääaine: Logistiikka, liikenne ja informaatio
Tarkastaja: Associate professor Nina Helander

Avainsanat: Lean startup, vertaisverkkokauppa, kuluttajamarkkinapaikka, palvelut, kuluttajalogistiikka

Teknologia on johtanut verkkokaupan ja vertaisverkkojen merkittävään kasvuun viime vuosina. Palveluiden korostuneen merkityksen rinnalla tämä on luonut uudenlaisia liiketoiminnan mahdollisuuksia nyky-yhteiskunnassa. Nykyiset palvelumallit muuttavat muotoaan ja ovat murroksessa monella alalla, mukaan lukien logistiikka ja kotiinkuljetukset. Kuluttajalogistiikassa kuljetuksen viimeinen vaihe on eräs kuljetuksen kriittisimmistä osa-alueista. Erilaisilla ratkaisulla pyritäänkin ratkaisemaan tätä niin kutsuttua viimeisen mailin ongelmaa. Vakiintuneita käytäntöjä ei kuitenkaan ole, etenäkään palveluiden ja logistiikan yhdistämisessä kuluttajien väliseen vertaisverkkokaupankäyntiin.

Tämä tutkimus keskittyy edellä mainittuihin osa-alueisiin ja tutkii asiakaslähtöisen kuljetuspalvelukonseptin kehittämistä vertaisverkkokaupalle. Tutkimuksen case-organisaationa toimii Suomen johtava vertaisverkkokauppapaikka Tori.fi, joka on osa Schibsted Media Group -kokonaisuutta.

Ongelmaa lähestytään lean startup -menetelmällä, joka tarjoaa käytäntöjä uuden tuotteen tai palvelun luomiseen äärimmäiseen epävarmuuden vallitessa. Lean startup yhdistää leanin ja ketterän kehityksen periaatteet innovointi prosessin kanssa. Tässä tutkimuksessa lean startupin soveltaminen käsittää erinäisiä vaiheita, joihin kuuluvat esimerkiksi valmistelut, workshop, eksperimentti mobiilisivustolla, kymmenen kuluttajahaastattelua, sekä oppiminen prosessin eri vaiheissa. Keskeisinä työkaluina kehityksessä käytetään käyttäjäpersoonia, lean canvasia, sekä loop-työkalua.

Workshop keskittyy palvelukonseptiin joka minimoi vertaisverkkokaupan myyjälle aiheutuvan vaivan. Eksperimentoidussa ratkaisussa useampi myytävä tuote haettaisiin myyjän ovelta ja hinnoiteltaisiin, lajiteltaisiin ja myytäisiin tämän puolesta. Myyjäkäyttäytymistä ja -tarpeita pyrittiin ymmärtämään edelleen syvällisemmin myös kuluttajahaastattelujen avulla.

Tuloksena tutkimus esittää lean startup -prosessin tuotokset, sekä niistä johdetut analyysit ja viitekehykset. Tärkeimmät tuotokset liittyvät vertaisverkkokaupan myyjäkäyttäytymiseen ja palveluiden systemaattisempaan yhdistämiseen, sekä lean startup -menetelmän käyttöön akateemisessa tutkimuksessa.

PREFACE

This study represents the biggest individual step towards my graduation. I am happy and proud to say I have made it. I want to thank everyone that has been a part of this. I am extremely grateful to have this many talented and supportive people around me.

From Devlog Logistics Strategic Development Forum I want to thank Aleksi Kukkarinen and Jani von Zansen for their mentoring and guidance. Their enthusiasm and encouragement has been extremely important part of the process. They have made the project possible in the first place, and created an environment where support and creativity have been constantly present.

From Tori I have gained significant help from the people involved. Especially I want to thank Thomas Djuspö, Juha-Antti Huusko, Jussi Lystimäki, and Esa Övermark for being such an important part of the process. Their inspiring attitude and motivational ways of working have been remarkably important influencers. They have given a huge impact on this work and I truly appreciate all the help they have given me.

I want to thank my instructor Nina Helander who has been extremely professional on guiding me throughout the process. She has been a great instructor by providing me with excellent guidelines and ideas, and by putting a lot of effort for me to succeed in the project. I also want to thank the other students involved in the meetings and seminars for all the important help and feedback.

Finally, the most important people to thank are the ones closest to me. My boyfriend Guillermo, family, and friends have provided me with priceless support during every single moment of this process. I would have not been able to do this without them.

Tampere, 08.03.2016

Marjaana Putro

TABLE OF CONTENT

1.	INTRODUCTION	1
1.1	Background	1
1.2	Focus of the Study	2
1.3	Objective and Research Questions	5
1.4	Methodology	6
1.5	Research Structure	11
2.	CONSUMER SERVICES AND LOGISTICS	13
2.1	Consumer Services	13
2.1.1	Service-dominant Logic	13
2.1.2	Customers and Co-production	15
2.2	Consumer Logistics	17
2.2.1	Logistics Activities	17
2.2.2	Last Mile Problem	18
2.2.3	Customer Service Elements	19
2.2.4	Trends and Innovations	21
3.	LEAN STARTUP	24
3.1	Ideology	24
3.1.1	Overview	24
3.1.2	Principles and Core Concepts	27
3.2	Lean Startup Process	29
3.2.1	Customer Segmentation	30
3.2.2	Lean Canvas	30
3.2.3	Building the Hypotheses	34
3.2.4	Getting out of The Building	35
3.2.5	Experiment and Measure	36
3.2.6	Learn	37
4.	OPERATIONAL ENVIRONMENT	39
4.1	Circular Economy	39
4.2	C2C E-commerce	40
4.2.1	Consumer Behavior	41
4.2.2	C2C and E-commerce in Finland	41
4.2.3	Examples of C2C Logistics	42
4.3	Tori Market Place	45
4.3.1	Operations and transactions	45
4.3.2	Categories	47
5.	LEAN STARTUP DEVELOPMENT PROCESS	52
5.1	Description of the Empirical Part	52
5.2	Preparation for the Workshop	54
5.2.1	Customer Segmentation	55
5.2.2	Personas	55

5.2.3	Lean Canvases.....	59
5.3	Workshop	64
5.3.1	Focus and Approach.....	66
5.3.2	Starting With the Experiment Loop	67
5.3.3	Leap-of-faith-assumption.....	71
5.3.4	Hypothesis and Experiment Elements	74
5.3.5	Experiment Design.....	76
5.4	Mobile Web Site Experiment.....	78
5.4.1	Execution	78
5.4.2	Results	80
5.4.3	Insights and Discussion.....	81
5.5	The Consumer Interviews	83
5.5.1	Overview and Objectives	83
5.5.2	Data Collection Description.....	85
5.6	Results of the Consumer Interviews.....	86
5.6.1	Pick-up Service Needs	86
5.6.2	Selling in Tori	88
5.6.3	Handling the Excess Second-hand Items	89
5.6.4	Insights and Discussion.....	89
6.	SUMMARY OF THE FINDINGS	94
6.1	Key Findings	94
6.2	Suggestions for the Case Company.....	95
7.	CONCLUSIONS AND DISCUSSION	100
7.1	Results Analysis	100
7.2	Methodological Implications.....	101
7.3	Theoretical and Practical Implications.....	104
7.4	Evaluation of the Research.....	107
7.5	Recommendations for Further Research	108
	REFERENCES.....	110

APPENDIX 1 EARLY ADOPTER INTERVIEW SCRIPT– ENGLISH TRANSLATION

APPENDIX 2 EARLY ADOPTER INTERVIEW SCRIPT – FINNISH ORIGINAL

LIST OF FIGURES (LATER)

<i>Figure 1. Focus of the research</i>	4
<i>Figure 2. Adaptation of the research onion (modified from Saunders et al. 2009)</i>	6
<i>Figure 3. The action research process (Saunders et al. 2009)</i>	7
<i>Figure 4. Data collection methods</i>	8
<i>Figure 5. Lean startup data collection elements</i>	9
<i>Figure 6. Research process overview (modified from Ries 2011)</i>	10
<i>Figure 7. Research structure</i>	11
<i>Figure 8. Pre-transaction, transaction and post-transaction elements of logistics customer service (Rushton et al. 2010, p.33)</i>	20
<i>Figure 9. Logistics customer service dimensions (Modified from Rushton et al. 2010, p.34; Murphy & Wood 2008, pp-92-94)</i>	20
<i>Figure 10. Principles of lean startup (Ries 2011)</i>	27
<i>Figure 11. Lean startup build-measure-learn feedback loop (Ries, 2011)</i>	28
<i>Figure 12. Lean startup building blocks (Adapted from Ries 2011, p.23)</i>	29
<i>Figure 13. Lean canvas (Modified from Maurya 2012a; LeanStack Inc 2015)</i>	31
<i>Figure 14. Problem-customer segment pair (Modified from Maurya 2015)</i>	32
<i>Figure 15. Simplified overview on buyer-seller transaction options</i>	46
<i>Figure 16. Simplified ideal buyer-seller transaction</i>	47
<i>Figure 17. Division of Tori categories (Modified from SCM Suomi Oy 2015a)</i>	48
<i>Figure 18. The most popular categories in Tori</i>	50
<i>Figure 19. Initial categories based on logistics complexity (Adapted from United Parcel Service of America 2013; Posti Group Oyj 2015; Matkahuolto 2015).</i>	51
<i>Figure 20. Lean startup process data collection elements</i>	52
<i>Figure 21. The progress of different sections</i>	53
<i>Figure 22. Lean startup based development process (Modified from Blank 2013, p. 72)</i>	54
<i>Figure 23. Busy Mom persona</i>	56
<i>Figure 24. The Decorator persona</i>	57
<i>Figure 25. The Dog Owner persona</i>	57
<i>Figure 26. Career Woman persona</i>	58
<i>Figure 27. Fashionista persona</i>	58
<i>Figure 28. Young Hipster persona</i>	59
<i>Figure 29. First initial lean canvas</i>	61
<i>Figure 30. Second initial lean canvas</i>	62
<i>Figure 31. Third initial lean canvas</i>	63
<i>Figure 32. Experiment loop (Moves The Needle LLC 2014)</i>	65
<i>Figure 33. Problem-centric approach (Cooper and Vlaskovits 2013, p.33)</i>	66
<i>Figure 34. First initial problem-customer pair</i>	67
<i>Figure 35. Experiment loop steps and chapters they are shown</i>	68

<i>Figure 36. Experiment loop's challenge, customer, problem, and solution.....</i>	<i>69</i>
<i>Figure 37. Illustration of the workshop notes for the solution</i>	<i>70</i>
<i>Figure 38. Loop axes</i>	<i>71</i>
<i>Figure 39. The positions of the assumptions.....</i>	<i>73</i>
<i>Figure 40. The leap-of-faith-assumption</i>	<i>73</i>
<i>Figure 41. First hypothesis</i>	<i>74</i>
<i>Figure 42. Experiment, behavior, and target metric</i>	<i>75</i>
<i>Figure 43. Overview on the comparison experiment</i>	<i>76</i>
<i>Figure 44. Pick-up service experiment main functionalities</i>	<i>77</i>
<i>Figure 45. Tori pick-up service experiment.....</i>	<i>79</i>
<i>Figure 46. Pick-up service experiment key metrics</i>	<i>80</i>
<i>Figure 47. Experiment results.....</i>	<i>81</i>
<i>Figure 48. Reasons, insights, and decision.....</i>	<i>82</i>
<i>Figure 49. Interviewed consumers.....</i>	<i>85</i>
<i>Figure 50. Consumer problems.....</i>	<i>88</i>
<i>Figure 51. Selling related problem factors</i>	<i>92</i>
<i>Figure 52. Seller types based on primary selling objectives</i>	<i>92</i>
<i>Figure 53. Options for second-hand items solution approach</i>	<i>96</i>
<i>Figure 54. Service types from Tori perspective</i>	<i>97</i>
<i>Figure 55. Findings and approaches of the key development areas.....</i>	<i>105</i>

LIST OF SYMBOLES AND ABBREVIATIONS

C2C	Consumer-to-consumer, denoting transactions conducted via the Internet between consumers (Oxford University Press 2016)
G-D logic	Goods-dominant logic
Last mile	Last step of the delivery process (Esper et al. 2003; Aized & Srai 2014).
MVP	Minimum Viable Product, the version of the product that enables a full turn of the build-measure-learn loop with a minimum amount of effort and the least amount of developed time. (Ries 2011, pp.76–77)
S-D logic	Service-dominant logic
Startup	An institution designed to create new products or services under conditions of extreme uncertainty (Ries 2011).

1. INTRODUCTION

1.1 Background

The advance and creative usage of information technology has been one of the most significant contributors to the development of the commerce world (Chapman et al. 2003). The e-commerce growth has been considerable over the years (eg. Kalakota & Robinson 2001; Chen & Dubinsky 2003; Nykänen et al. 2015). Consumer-to-consumer (C2C) e-commerce, which refers to transactions directly between the consumers, has also been growing increasingly (Tian et al. 2015). In Finland C2C e-commerce has recently expanded from a marginal event to a widely-accepted phenomenon (The Federation of Finnish Commerce 2015).

Regardless that the services create a significant part of the global economy (Bettencourt 2010), the connection between the C2C platforms and services is rarely obvious. Although C2C transactions occur between the consumers, there can be business potential in providing services that support the transaction process and increase the value for the customers.

The importance of services in general has been growing steadily for decades while the importance of goods has declined (Berry et al. 2006). This demand shows no signs of stopping. Within the service sector, such services as education, consulting, health care, or legal services are considerably expanding. The role of knowledge based services is growing, and on the other hand, the more traditional services such as transportation, warehousing, and material-handling are currently restructuring. (Mathe 2012, p.115)

Also the traditional logistics business models are modified by the significant growth of e-commerce (Nykänen et al. 2015, p.16). There are still no established operations models for home deliveries (Punakivi et al. 2001), although the last part of the delivery, often referred as the last mile, is often considered as one of the most important parts of the order fulfillment process (Esper et al. 2003). Companies have to come up with innovative ways to apply order fulfillment strategies (Lee & Whang 2001). New approaches are needed in order to succeed in the constantly changing environment.

In this research these areas are tackled with a modern business development method called lean startup. Lean has taught how to build quality into products from the inside out. Lean startup, introduced by Ries (2011), is a business development method that adapts the ideas of lean manufacturing into entrepreneurship. Lean startup is a set of practices for institutions designed to create new products or services under conditions of extreme uncertainty. (Ries 2011)

This study focuses to examine new potential business models and alternative executions for the traditional logistics models on the C2C marketplace environment. The development process follows the methodology lean startup – a business development method that brings the principles from lean manufacturing and agile development to the process of innovation (Lean Startup 2015). Case organization for this thesis is a Finnish consumer marketplace Tori.fi (later referred as Tori) that is part of Schibsted Media Group.

Tori is the leading online consumer marketplace for second-hand items and classified ads in Finland. All types of different items such as furniture, apartments, and free-time-equipment are sold and purchased by consumers in Tori. Every third of Finnish people uses Tori every week. Based on page views it is the third popular internet site in Finland, right after the Finnish tabloid sites. Tori's three biggest categories are decoration and furniture, clothing and shoes, along with children accessories and toys. (SCM Suomi Oy 2015b) In order to provide better customer service and accelerate business growth Tori aims to offer a delivery service solution for its consumers in Finland. This creates the base for the development process in this study.

It has also been recognized that the common usage of resources has to be made in a more intelligent and sustainable way (European Commission 2015b). In modern globalized societies of the future cannot be built on the 'take-make-dispose model' as it is reaching its physical limits (European Commission 2015b; Ellen MacArthur Foundation 2015a). Circular economy is a continuous positive development cycle that aims to keep, products, components, and materials at the highest utility and value at all times (Ellen MacArthur Foundation 2015a). There is a need for new innovations, operation models, business competences, pilots, and networks also in circular economy (Sitra 2015b).

Customers have become more and more competent in articulating their needs and expressing their demands. In many cases the customers also are the co-creators of the services. (Bouwman et al. 2008, p.3) In lean startup the customers are also important part of the process but understanding the needs of the customers is done by actually engaging with them – by “getting out of the building”. This means turning hypotheses related to developed concept into facts as soon as possible. It is done by asking customers if the hypotheses were correct and quickly changing those that were wrong. (Blank & Dorf 2012) Instead of just listening to the customer the idea is to participate the customers and learn throughout the development process (Ries 2011) According to Maurya (2012a) in the right context customers know how to address their problem but it is the providers job to come up with the proper solution.

1.2 Focus of the Study

Although consumer-to-consumer platforms and peer-to-peer networks have been growing increasingly, the scientific studies related to the topic are limited (Tian et al. 2015). Often

consumer behavior is studied from the buyer perspective and limits to business-to-customer (B2C) environment or global marketplaces (see eg. Liebermann & Stashevsky 2002; Demangeot et al. 2015; Seo & Fam 2015). Scholars know only a little about online reselling behavior, although amateur consumer seller plays a key role in C2C online auctions (Chu 2013). Plouffe (2008) furthermore points out is that a lot of the C2C research focuses just on the online auction phenomenon. C2C e-commerce has proven to be a distinct area of research that requires new models of operation (Jones & Leonard 2008).

C2C logistics is an area of development that also is neither widely studied nor it has established practices. Most consumer logistics related theories and research focuses on business-to-consumer (B2C) environment (see eg. Davis & Manrodt 1994; Murphy & Wood 2008; Kallionpää et al. 2015) or on the global large platforms such as Amazon or eBay.

Circular economy would create demand for new business services, such as collection and reverse logistics that support the end life products being reintroduced to the system. (Ellen MacArthur Foundation 2015b) Although services have significant role for businesses (Vargo & Lusch 2004; Helander et al. 2013) and the circular economic principles emphasize the importance of services, it is not widely studied on how to systematically combine the services with the expanded phenomenon of C2C and classified commerce. There are not really studies on how to develop the logistics, or how to link the related services to this type of environment.

All of these factors indicate that new models are needed, and the traditional models are no longer the best solution in many industries. An important perspective of this thesis is on how to increase the connection between the services and second-hand consumer trading. The research is a part of Devlog Oy Logistics Development Forum's Consumer Services and Circular Economy development project. Figure 1 illustrates the theoretical focus of this study.

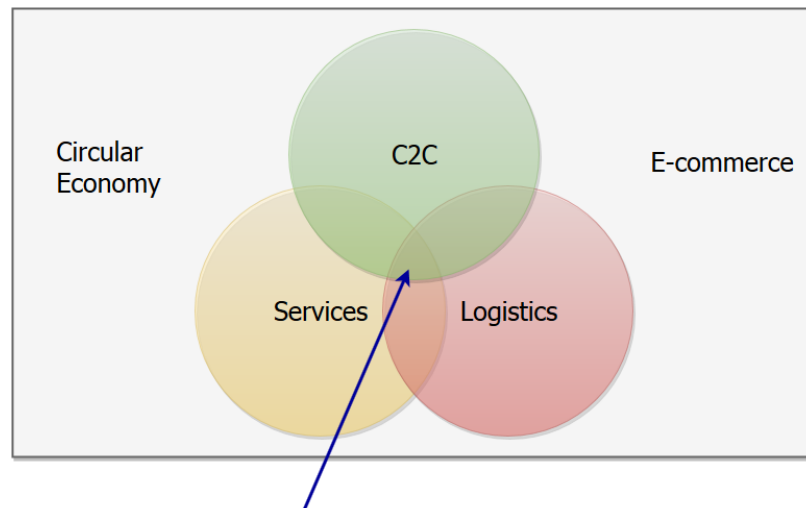


Figure 1. *Focus of the research*

This thesis is in the intersection of the development areas of C2C, services, and logistics. It examines these areas and their how they connect to each other. This setting creates a gap that is not widely examined even though a lot of the aspects are considered extremely significant. The principles of circular economy are strongly present on the background, since they include a lot of aspects that strongly support the development of C2C. More general level e-commerce is also an important background influencer, since lot of theories are related to e-commerce or B2C commerce, although a lot of them cannot be directly applied into this case and the C2C environment.

The point is not in this stage to develop a specific technical solution for distribution, or optimize the logistics network. Instead the idea is to analyze what kind of logistics related service could be developed with lean startup methodologies, and combined with the C2C environment. In this sense the setting of the main research topic, C2C delivery service concept, is treated as a startup – an institution that works with extreme uncertainty (Ries 2011).

For this project an interesting point is to also to understand how lean startup works as a methodology for this type of project. Lean startup is utilized in a way that serves both the academic purposes and the best possible outcome for the case company. However the resources are limited so this thesis will progress with the development process as long as is suitable for the research. This does not mean that the process would continue or is described here until the launch or implementation of the service concept. This project creates the beginning for this particular development area and it can be further continued towards the recommended direction.

1.3 Objective and Research Questions

The study is made as an assignment for Strategic Logistics Development Forum. The topic is to develop a distribution service concept for Finland's leading online market place Tori.fi (later referred as Tori).

The objective for the thesis is to progress with the delivery related service development of the C2C marketplace Tori. It is critical to understand what type of problems and needs are related to the distribution concept of the online market place Tori. In the process the customer needs create the basis for the development. The main objective for the thesis can be expressed as a following main research question:

- *How to develop a consumer-oriented delivery service concept for C2C marketplace with lean startup principles?*

The main focus is on how to develop a delivery service concept for the C2C marketplace utilizing the principles and methodology of lean startup. Instead of just designing a distribution network, the idea is to research what kind of distribution related service could answer the customer needs in Tori, and how does this development process progress. The research of the empirical part is later focused on a specific customer group, Female and Fashion segment, and further on the selling behavior. To support the main research question, there are sub research questions set for the work. They are determined as follows:

- *What are suitable approaches for consumer services and logistics?*
- *What is lean startup ideology and methodology?*
- *How is C2C as an operational environment?*
- *What type of service concept would serve the C2C selling needs?*
- *What to take into account when aligning service(s) with second-hand C2C?*

The sub-questions determine the different areas that are examined during the development process. With the help of these sub questions, it should be possible to find an answer to the main question of the study.

In this thesis the customer always refers to the consumer and user of Tori. The customers in here are not for example the advertisers since the customers of the developed service would be the Tori users or consumers.

The first supporting research question examines the consumer services and logistics in general level, and the idea is to find proper approaches that support the development. The second lower level research question aims to understand what is lean startup ideology and methodology, in order to understand how it can successfully be adapted in this type of topic. With the help of the third sub question the idea is to understand the C2C environment and the case company Tori operational environment better. The fourth question is probably harder to answer, but also works as a reference in many parts of the

development process. This question is probably the one that the case company is the most interested about. Although the main research question narrows down to delivery concept topic, the focus is on the services and customers. The fifth lower level question focuses on the topic of more systematic alignment of the services and logistics with C2C environment.

The thesis project is part of a Devlog Logistics Development Forum's consumer services and circular economy network. The focus of the network is on the opportunities on new business models and interfaces for companies and value chains. Focus of this project is a lot in the future opportunities and innovations. The emphasis is on adapting new kind of thinking and business models, instead of doing things the way they have traditionally been done. The idea is to understand what kind of new possibilities could serve the consumers better. Regardless of that, the academic perspective is strongly present, and also more traditional theories are applied and acknowledged.

1.4 Methodology

This chapter describes the factors related to research strategies and methods. An important point of the research philosophy is to precisely understand what is done when embarking on research (Saunders et al. 2009). On the Figure 2 the most important aspects of this research's design are presented utilizing the research onion by Saunders et al. (2009).

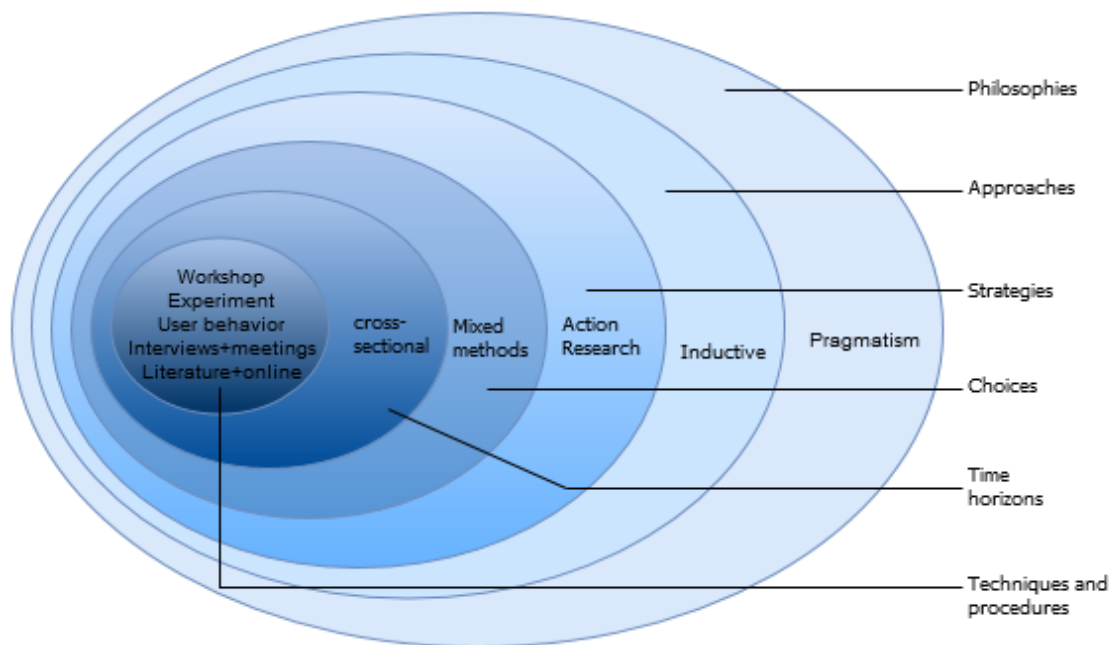


Figure 2. Adaptation of the research onion (modified from Saunders et al. 2009)

The most outer layer of the onion describes the research philosophy which in this project is pragmatism. Pragmatism is a research philosophy that emphasizes the practical nature of information. It includes different orientations that combine action emphasis with practical approach on the information creation. (University of Jyväskylä 2011) The

The thesis is about to be executed mainly as a qualitative research and the emphasis is on qualitative data. A qualitative research is usually a combination of utilizing previous researches and theories, empirical research and the evaluation and inference of the researcher (Saaranen-Kauppinen & Puusniekka 2006). However quantitative data is also utilized as a part of the lean startup process of the thesis.

Cross-sectional time horizon refers to a study of a particular phenomenon at a particular time. Opposite to this is a longitudinal time horizon means that the project is taken over a longer period of time. (Saunders et al. 2009, p.155) In this project the time horizon is cross-sectional.

The data collection is made in different ways. The data collection in the research is illustrated in the Figure 4. The main sources of data are the lean startup process, literature, online sources, and the case company Tori.

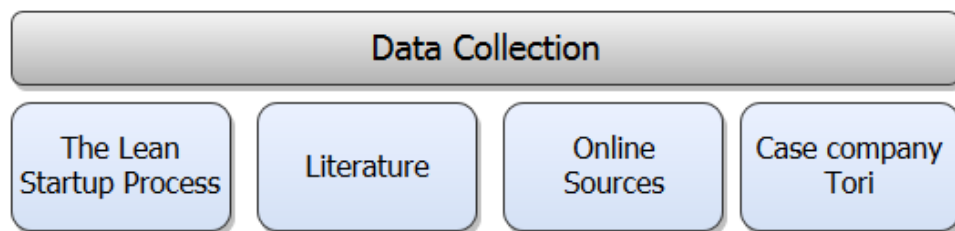


Figure 4. Data collection methods

An important part of the data collection process is the combination of different steps of the lean startup process. Another method for information gathering is a literature review. Based on theory and different kind of models it is possible to analyze and understand the current situation and adapt the theory in development process. The main references for literature review are scientific articles and books. However, since the related theories and methodologies are relatively new, a lot of information is on professional blogs and business development related online sites. The online sites and publications are used to understand perspectives related to the theories and present current adaptations in real life examples. These type of recourses are also utilized but their reliability is being carefully considered. The meetings and information received from the case company Tori is also used as a recourse material.

The 'lean startup process' data collection method consist of different data collection elements in this research. The different outcomes and parts of the process together create the empirical part in this project. Lean startup is not only used to come up with a certain solution or focus only on the end result. The whole process has value and the outcomes are in its different stages that follow the build-measure-learn feedback loop. Build-measure-learn feedback loop and lean startup principles are presented in the third chapter of this study.

Although the build-measure-learn cycle is an important part of lean startup the idea is not to mindlessly go through these motions. In lean startup the learning is above everything else and it encourages on broad thinking, exploration and experimentation. The key is to really understand what is going on and be to open to new possibilities. (Croll & Yoskovitz 2013, p.41) The utilized basic data collection elements related to the lean startup process are represented in the Figure 5.

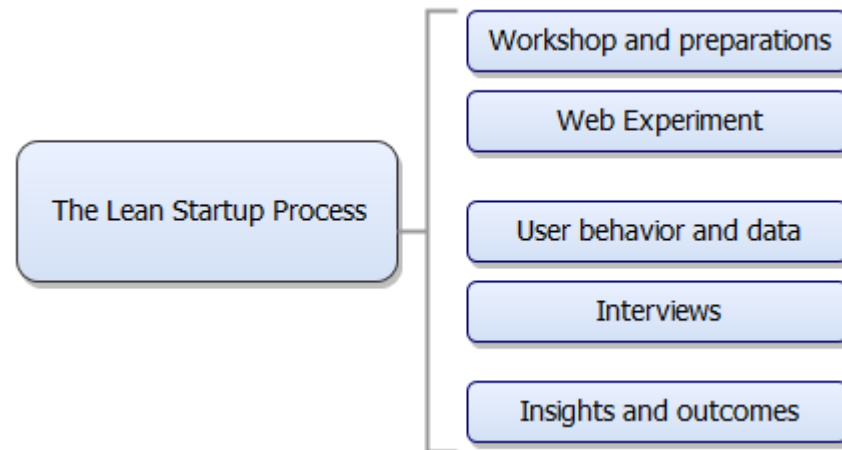


Figure 5. *Lean startup data collection elements*

In workshop and its preparations the ideas are combined with theory to understand the aspects and problems worth examining. In the workshop the mobile web experiment is designed and executed afterwards. The experiment provides user data specifically for the purpose and the idea is to study the user behavior in the context. The results and different aspects of the setting are examined further with customer interviews. Different meetings with company representatives are also a part of the work since they give insights and additional information to the thesis. Decisions are made based on learning and insights that are conducted in the different stages.

Tori marketplace and its buyer-seller operations are extremely consumer-based. It is important that the consumer and needs are in the center of the development since they create the base for the entire service. On the Figure 6 the building blocks of the research process are described.

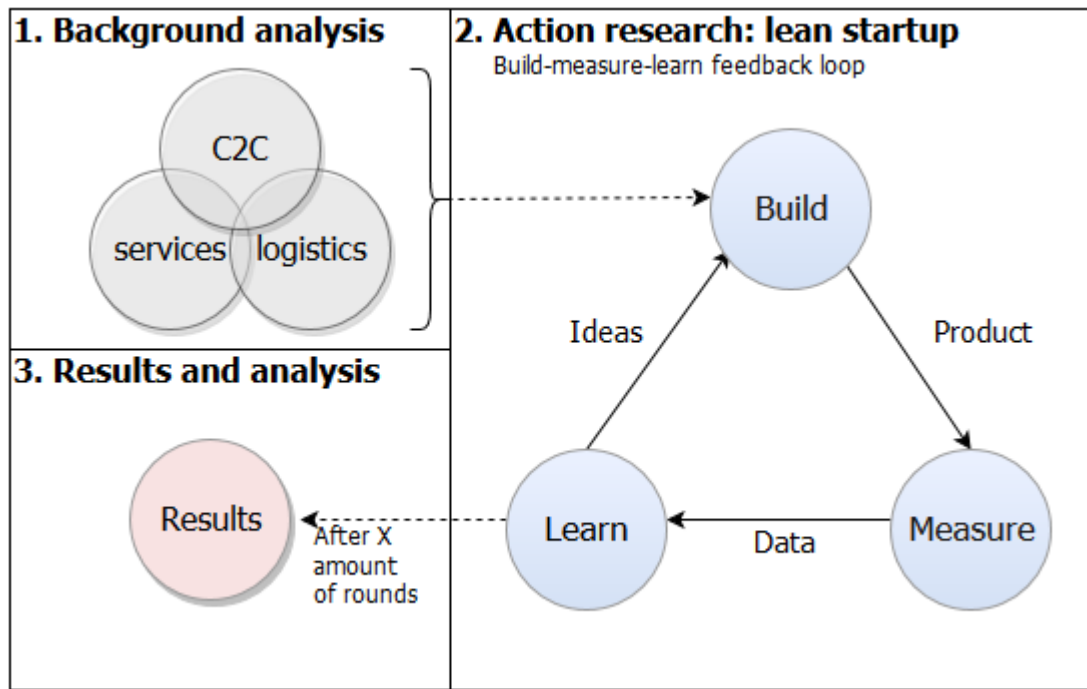


Figure 6. Research process overview (modified from Ries 2011)

The background analysis is conducted on services and logistics together with an overview on C2C. With the help of theoretical background the initial ideas for the concept were conducted and developed further in the workshop. The execution of lean startup process is described in more detailed in the chapter 5. A mobile website experiment, that measured a banner activity, was made based on the workshop. The web experience was set out to test user reaction and engagement to the designed pick-up service. This part was followed by ten consumer interviews. The idea of consumer interviews is to get a deeper understanding of the consumer needs related to the potential service solution and C2C selling.

The choice of using lean startup methodology came from the company initiative. Tori's processes are extremely consumer-focused and based on lean thinking and startup methods. Lean startup methods are used throughout the company in different areas of development and operations. (SCM Suomi Oy 2015b) It was a natural choice to utilize this type of method since the company already had the tools and its processes are adapted to the ideology. Also experiments could be made in a fast pace and workshops could be held with people who are used to work with lean startup principles. These are not the only reasons to back up the usage of lean startup methods and tools. For empirical research it is important that the methodology and research problem are tightly connected (Hirsjärvi et al. 2007). The topic and research problem related factors create a setting of extreme uncertainty and a lot of unknown aspects. Lean startup was created for this type of environment which makes it suitable as a development method. Lean startup also gives a new type of approach to the topic, since it previously has not been used specifically in this type of research setting.

1.5 Research Structure

This chapter describes the structure of the study. The second, third and partly fourth chapter cover the theoretical part of this study. Fifth chapter is the empirical part. Sixth chapter gathers the results of the thesis with recommendations. Seventh chapter presents the conclusions of the thesis. These structure is illustrated in the Figure 7.

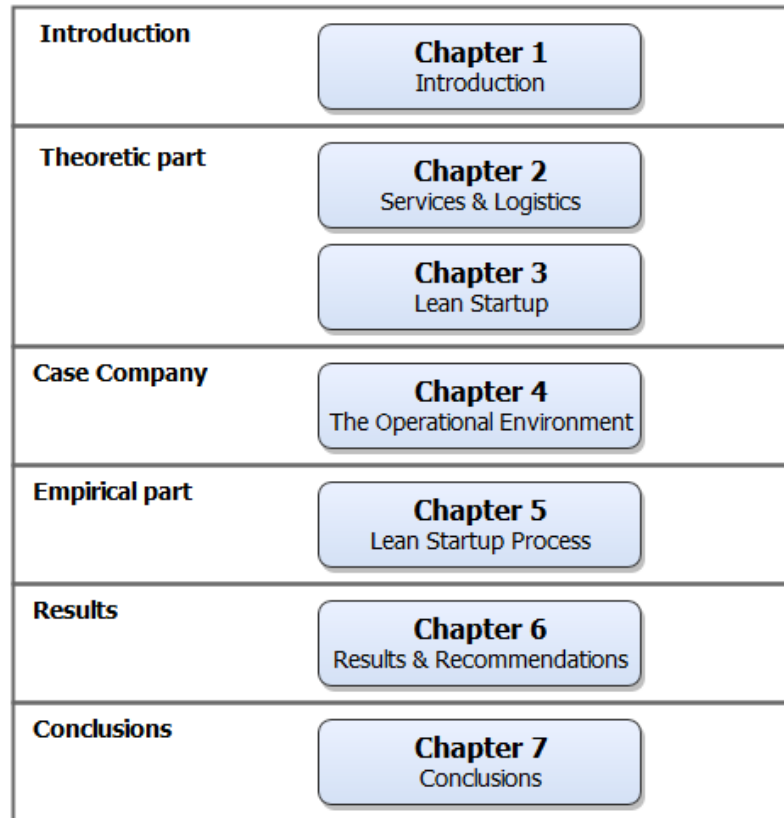


Figure 7. Research structure

The second chapter focuses on the consumer services and consumer logistics. Consumer services are viewed from service-dominant logic perspective, presented by Vargo & Lusch (2004), where the customers are seen as co-creators for the services. In the approach the services are in the focus instead of the traditional product-focused development. On the later part of the second chapter the consumer logistics are examined. Some theory relater to consumer logistics is presented here, although some of the traditional methodologies are not directly utilized in the development process. The idea is to get an overview of the consumer logistics and the related problems, customer service elements and trends.

In the third chapter of the thesis lean startup is represented. Lean startup is an important part of this project since it works as a method but as an also ideology behind the work. The third chapter describes the ideology and the process used in the thesis related to the lean startup process.

The fourth chapter is about the operational environment. First in this chapter an overview of the circular economy principles are presented. This is followed by a chapter of C2C e-commerce environment. This chapter is divided into three sections, which are the consumer behavior, C2C and e-commerce in Finland, and C2C logistics. The third sub chapter focuses on the case company and describes the basic operations and transactions, and categories of Tori.

The fifth chapter describes the lean startup process which covers the empirical part of the thesis. This starts with the description of the empirical part and the pre-workshop preparations. The third sub chapter describes the lean startup workshop progress. This is followed by a chapter that describes the mobile web experiment, which was designed as a result of the workshop. The fifth lower-lever chapter is a description on the consumer interviews, and it is followed by a chapter that illustrates their results.

On the sixth chapter the results and recommendations for further development are gathered. The results chapter sums up the results that the literature review conducted together with the empirical part. Based on this the recommendations are made also in the sixth chapter. This chapter analyses the results, and present the recommendation related to the topic and for the case company. This is followed by the seventh and the last chapter that combines the conclusions of the study. This chapter presents the discussion of the results, methodological, theoretical, and practical implications, as well as the evolution of the research and recommendations for further research.

2. CONSUMER SERVICES AND LOGISTICS

This chapter presents a theoretical overview on consumer services and logistics. First the services and their significance is being examined from the service-dominant logic perspective. This is followed by a logistics related chapter that gives an overview on common-level theory and aspects related to the topic.

2.1 Consumer Services

Service-dominant logic departs from the traditional goods-dominant logic of exchange (Vargo & Lusch 2006). In this chapter first the service-dominant logic overview is examined, which is followed by a part that describes the customer co-production on services.

2.1.1 Service-dominant Logic

The significance of service business have been growing in many different ways and levels (Helander et al. 2013, p.11). Recently in service business the segment of direct support and care activities to home and families has been growing (Mathe 2012, p.115). Vargo and Lusch (2004) presented a new perspective on marketing which they defined as service-dominant (S-D) logic. In the traditional, foundational, goods-dominant (G-D) logic of exchange the goods were in the focus of exchange and services represent a special case of goods. S-D logic, represents a departure from this goods dominant logic. It views applied, specialized skills and knowledge as the focus of economic exchange and as one of the society's fundamental foundations. (Vargo & Lusch 2006, p.43)

Service-dominant logic shifts from an emphasis on the exchange of operand resources, which are usually tangible inert resources, to an emphasis on operant resources, dynamic resources that act upon other resources (Vargo & Lusch 2006, p.43). The main differences between the traditional product-dominant logic and Vargo & Lusch's (2006) S-D logic is collected on the Table 1.

Table 1. Key differences between the G-D logic and S-D logic (Modified from Vargo & Lusch 2004, p.11)

	Goods-centered dominant logic	Service-centered dominant logic
Primary unit of exchange	People exchange for goods that serve primarily as <i>operand</i> resources	People exchange to acquire benefits of services or specialized competences, such as knowledge and skills. Knowledge and skills are <i>operand</i> resources
Role of goods	Goods are operand resources and end-products. Marketers take matter and change its form, place time and possession	Goods are transmitted of operand resources. They are intermediate "products" that are used by customers as appliances in value-creation process.
Role of customers	Customer is the recipient of goods. The customers are being segmented, penetrated, distributed and promoted by marketers. The customer is an operand resource.	The customer is a co-producer of service. Marketing is a process of interacting with the customer. The customer is primarily an operand resource, only occasionally functioning as an operand resource.
Determination and meaning of value	Value is determined by the producer, embedded in the operand resource (goods) and defined in terms of "value exchange"	Value is perceived and determined by the consumer on the basis of "value in use". Value is a result from the beneficial application of operand resources sometimes transmitted through operand resources. Firms can only make value propositions.
Firm-customer interaction	The customer is an operand resource. Customers are acted on to create transactions with resources.	The customer is primarily an operand resource. Customers are active participants in relational exchanges and co-production.
Source of economic growth	Wealth is obtained from surplus tangible resources and goods. It consists of owning, controlling, and producing operand resources.	Wealth is obtained through the application and exchange of specialized knowledge and skills. It represents the right to the future use of operand resources.

The table combines the differences in traditional good-dominant (G-D) logic and the S-D logic. The comparison is viewed by six different factors on their own rows of the table. These are the primary unit of exchange, role of goods, role of the customers, determination and meaning of value, firm-customer interaction, and the source of economic growth. The first column sums up the typical factors for the G-D logic, as the right column for the S-D logic.

In terms of classification and function the S-D logic places services superordinate to goods, but does not superior services in terms of importance. In the fabric of S-D logic is the nested relationship between service and goods. According to S-D logic the function of goods is to deliver a service. The idea is to understand how to optimize the benefits –

the joint value co-created – for the exchange partners. (Vargo & Lusch 2006) According to Chesbrough (2010) services and products are getting closer to each other. Product is a part of the offering made to the customer whereas services can be productized and made more concrete. However services have their own features that should be taken into consideration. The incorporeity and difficulty to present services can make it harder for the customer to see what he or she is actually paying for. Also comparing services and their prices is harder than comparing products. (Chesbrough 2010, pp.53–54) There is some critique towards S-D logic. Achrol & Kotler (2006) emphasize such elements as knowledge resources, relationships, and networks as key elements of the conceptual system, that should be understood beyond just services.

2.1.2 Customers and Co-production

Product based thinking places the customer at the end of the value chain. Suppliers create specifications to describe the product for the potential customers. These customers can compare specifications to find the product that fits their needs. According to Chesbrough (2010) in services the customer have to be understood differently and their role in the innovation process changes. He states that in the world of services the development of specifications is a lot harder than in the world of products. It is also harder for the consumers to compare the specifications and to verify that the claimed specifications are in fact being delivered.

Customers have become more competent in expressing their needs and in many cases they are the co-creators of services. (Bouwman et al. 2008, p.3) In the service process it is more and more common to create value together with the customer. Therefore in service business renewal the customer should be on the center of the development. On the essence of the development should be the customer needs, and the understanding on the type of value which is being pursued to create to the customer and together with the customer. (Helander et al. 2013, p.11)

From the traditional, goods-based manufacturing perspective the producer and customer usually are separated in order to enable maximal manufacturing efficiency. Vargo and Lusch (2004) however view production as an intermediary process and that production does not end in manufacturing process. As stated previously, goods provide services for and in conjunction with the consumer. In order for the services to being delivered the customer still has to learn to use, maintain, repair, and adapt the appliance to match the unique needs, usage situation and behavior. Therefore by using the product the customer is continuing the marketing, consumption, and value-creation and delivery processes. (Vargo & Lusch 2004)

There are two ways the customer becomes involved in co-production and creating value. One of them is through consumption and the other is through co-design. Through direct feedback and indirect feedback the customers influence the development and

modification of those products and services offered. (Flint & Mentzer 2006) Commonly co-production has been thought as the customer performing some of the work traditionally done by a producer. Jaworski & Kohli (2006, p.109) extend the idea of co-production to the customer-needs identification process. They discuss an alternative needs-identification process, where instead of the firm just asking and learning from the customers, the firm and its customers together co-create the voice of customers by engaging in learning. S-D logic embraces value-in-use and posits that only the customer can determine value, since customer is using the offerings of the service provider (Vargo & Lusch 2006, p.49).

Services can be described as co-operation between different persons and the customer is participating on producing the service. The amount of work that the customer has to do can vary between different services. In many cases it can however be modified. (Sipilä 2003, pp.22–23) According to Flint & Mentzer (2006) many cases the customers are partners as well as suppliers, exchanging and modifying value propositions within a dynamic web of constantly changing needs. Customers value different components of the value proposition in each of their different use situations. Suppliers however have to anticipate or respond to varying value perceptions and desires in different customer use situations. (Vargo & Lusch 2006)

Different companies are constantly seeking for opportunities to offer better services. Even the kind of companies that are not purely in a service business or in a manufacturing industry must rely on service operations to secure continued profitability. (Berry et al. 2006) Modern technology capabilities and rapidly changing needs and demands make sure that the service providers have to respond almost instantaneous. They have to constantly change the service offering. (Bouwman et al. 2008, p.3) What it comes to services often customers need to explain more about what they need. These needs can also vary from one organization to another. This also means that the suppliers cannot necessarily commit to long production runs and one-size-fits-all thinking to serve these customers and their needs. Instead it is important for them to figure out how to give the customers what they need in a way that is also profitable for themselves. (Chesbrough 2010, pp.53–54) Customer intimacy refers to the kind of tailored service systems, which fulfill not only the known, but also the hidden customer needs. According to Helander, et al. (2013) building customer intimacy requires thinking in a way, that instead of producing something to the customer, something is produced in co-operation with the customer.

Service innovation is helping the traditional product innovation oriented companies to fulfil market demand whereas the service companies need to come up with new concepts and approaches (Bouwman et al. 2008, p.3). Because of the fuzzy nature of services it can be challenging to describe precisely what elements of renewed service offering can be determined as innovative. Many characterizations are criticized for being too limited to capture new services and their distinctive features accurately. (Agarwal et al. 2015)

According to Bouwman et al. (2008, p.3) service innovation and development are closely connected to business model design and innovation. Although many companies make drastic improvements on their service offerings, only few succeed in creating service innovations that generate new markets or reshape the existing ones (Berry et al. 2006).

Companies should become more open to external knowledge and ideas (Chesbrough 2006). Open innovation is a paradigm which combines internal and external ideas into new products, new architectures and systems. It assumes that firms can and should use external and internal ideas, as well as internal and external paths to market, as they look to advance their business. (Chesbrough 2010, pp.68–69) It is ideal that a service business is not only pursuing customer satisfaction at any cost but that customer orientation is being built in such way that is also beneficial for the service provider. If the focus is just alone in customer satisfaction there is a risk in customer becoming unprofitable. (Helander et al. 2013, p.31).

2.2 Consumer Logistics

For well-known companies activities such as supply chain management, logistics, and packaging along with change management are often critical success factors. It is worth considering why top companies are excellent in the kind of operations that are outside their core business, and not visible to the outside world. (Gustafsson et al. 2006, p.3) Principles related to consumer logistics are presented in this section following with the section of the recent trends in the industry.

2.2.1 Logistics Activities

To successfully apply different approaches it is important to understand the various logistics activities. Logistics activities vary between different companies but Murphy & Wood (2008, pp.22–23) present a list of the common logistics related activities. They include the following:

- Customer service
- Facility location decisions
- Inventory management
- Order management
- Production scheduling
- Returned products
- Transportation management
- Demand forecasting
- Industrial packaging
- Materials handling
- Parts and service support

- Procurement
- Salvage and scrap disposal
- Warehousing management.

The activities in logistics system can vary from company to company so one logistics system does not fit all the companies.(Murphy & Wood 2008) Since studied environment is a consumer marketplace, a lot of the listed activities in this case are different or irrelevant for the topic.

Especially global companies constantly evaluate their production and distribution strategies to increase customer service at the lowest possible cost and highest profit (Goetschalckx et al. 2002). Supply Chain Management is an important focus for the competitiveness of a company. Frequently supply chain network design objective is network efficiency, which usually focuses on either cost-minimization or profit maximization. (Meepetchdee & Shah 2007) Distribution cost or logistics total cost is an important factor taken into consideration in traditional distribution network development. The logistics costs can vary according to the sophistication of the distribution system and the intrinsic value of the product itself. (Simchi-Levi et al. 2003)

Instead of just imposing an additional cost, the emphasis on distribution network development has been in added value (Simchi-Levi et al. 2003, p.13). Instead of just providing services, the company should organize its functions around the customer, and deliver experiences and value (Löytänä & Korteso 2011). The traditional operations between consumer and supplier has changed because of the developments in the global economy. Companies need to be extremely customer-centric, since customers have more choices and supply alternatives are more transparent. Besides addressing customer needs, it is also important to understand how to capture value to provide new products and services. (Teece 2010)

2.2.2 Last Mile Problem

In literature the last step of the delivery process is referred as the last mile delivery (Esper et al. 2003; Aized & Srai 2014). The last mile is a critical link between consumer-based online order and delivery, and it is often perceived as one of the most critical element of the order fulfillment process (Esper et al. 2003). In this case the last mile and first mile issues are very relevant, when focus is on consumer and home deliveries. In the last mile usually the parcel is brought to home or office of the recipient. It can also remain stored until the recipient picks it up, or it can be forwarded to another address.(Aized & Srai 2014)

The growing online shopping requires distribution to more and more delivery destinations. Compared to traditional retail this means that smaller material flows are distributed to more destinations than before. From the logistics provider this requires

efficient route and transport equipment optimization. (Nykänen et al. 2015, p.16) The last mile is one of the biggest challenges in B2C e-commerce. Especially in electronic grocery shopping combining of profitability and high service level is challenging. Home delivery logistics in e-commerce has been one of the key factors leading to large losses for pioneering companies. There is no proven operations model for the home delivery service. (Punakivi et al. 2001)

A few companies have come up with innovative ways for applying order-fulfilment strategies. It is important to use information properly and leverage existing resources to co-ordinate order fulfilment activities. The principles are not new but information technology enables them to be applied in new and expanded ways. (Lee & Whang 2001) It is important for companies to constantly innovate beyond incremental improvement. (Chapman et al. 2003) Innovative companies do not just settle on reacting to customer needs and wishes, but instead to predict and recognize the customer business changes. This way it is possible to develop competences in a way that it is possible for the company to predict the future customer needs. (Kallionpää et al. 2015)

Only getting the order is not enough, but it is important for companies to choose the right e-fulfillment strategies. One main aspects on successful e-fulfillments is right kind of use of information flows. More-accurate, up-to-date customer demand information can lower the costs and improve efficiency, as products can be delivered the most direct way. (Lee & Whang 2001)

Online purchasing has increased B2C shipments and transportation carriers' direct-to-consumer deliveries. The carrier is plays important role on the last impression on the order fulfillment for the customer. According to Esper et al. (2003) offering a choice of carrier leads to increased willingness to purchase and greater anticipated online shopping satisfaction. Rapidly growing online business creates new challenges for efficiency in city logistics. The flow of goods is divided in several different delivery destinations. The emphasis therefore is more on the combination of flows. Combining deliveries often requires a lot of co-operation from the companies that buy the deliveries. Cargo handling center type of operations are not that widely common in Finland because the co-operation is not utilized properly. (Nykänen et al. 2015)

2.2.3 Customer Service Elements

The logistics customer service components can be classified in different ways. According to Rushton et al. (2010) the customer service transaction elements can be divided in to elements that view the factors before, during, and after the transaction. The three categories, pre-transaction, transaction and post-transaction, reflect the nature and timing of the particular service requirements. (Rushton et al. 2010, p.33) These elements are illustrated on the Figure 8.

Pre-transaction elements	Transaction elements	Post-transaction elements
<ul style="list-style-type: none"> - written customer service policy - accessibility of order personnel - single order contact point - organizational structure - method of ordering - order size constraints - system flexibility - transaction elements 	<ul style="list-style-type: none"> - order cycle time - order preparation - inventory availability - delivery alternatives - delivery time - delivery reliability - delivery of complete order - condition of goods - order status information 	<ul style="list-style-type: none"> - availability of spares - call-out time - invoicing procedures - invoicing accuracy - product tracing/warranty - returns policy - customer complaints and procedures - claims procedures

Figure 8. Pre-transaction, transaction and post-transaction elements of logistics customer service (Rushton et al. 2010, p.33)

Customer service in logistics can mean different things for different companies according to Murphy & Wood (2008, p.22). They use a definition by Kerin et al. (2004) which according to customer service is the ability of logistics management to satisfy users in terms of time, dependability, communication, and convenience. One of the most important trends in businesses today is easy and solution oriented customer service. In the era of customer-focused business it is important to understand that as customers value their time more, they are less tolerant of flaws in customer service. (Kalakota & Robinson 2001, p.45)

The customer service elements can be classified by these multifunctional dimensions. The dimensions try to enable a seamless service provision across the whole range of company functions. (Rushton et al. 2010) Murphy & Wood (2008, pp.92–94) determine the main multifunctional customer service dimensions as time, dependability, communications and convenience. Rushton et al. (2010, pp.32–34) introduce almost the same customer service dimensions but instead of convenience they talk about flexibility as the fourth dimension. This research uses the convenience term and the elements are combined on the Figure 9.

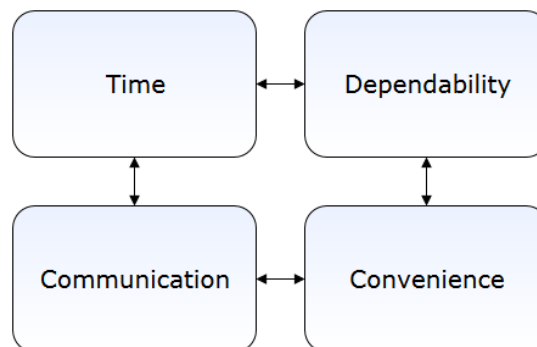


Figure 9. Logistics customer service dimensions (Modified from Rushton et al. 2010, p.34; Murphy & Wood 2008, pp-92-94)

Time here usually refers to order fulfilment cycle time. Dependability is guaranteed fixed delivery times of accurate, undamaged orders. Communications means the ease of order taking and queries response. Flexibility is the ability to recognize and respond to changing

customer needs. (Rushton et al. 2010, p.34) Murphy and Wood (2008, p.94) define the term convenience in quite similar way. According to them convenience focuses on the ease of doing business with the seller, but different customers may have different perceptions of the ease.

For e-shopping in general level consumers are eager to get the merchandise as soon as possible and to be delivered exactly where they want it. Same-day deliveries are becoming popular in the United States and Japan. Consumers can select from delivery points such as home, office, convenient stores, or different pick-up points. The delivery fees are important for the customers and lot of stores have policy of free delivery after the total amount of shopping exceeds a certain level. (Taniguchi & Thompson 2015) Third of Finnish people have announced that they can wait for the delivery for up to five days. Third of the people in Denmark and Sweden, and a fourth of Norwegians expect to receive the delivery within three days. (Suomen Osto- ja Logistiikkayhdistys LOGY ry 2015)

2.2.4 Trends and Innovations

Most of the existing problems that companies face are not brand new. They might already have solutions although not necessarily from an obvious competitor. (Maurya 2012a) Companies must spot trends fast in order to create effective strategies. Identifying trends helps to analyze and synthesize consumer behavior, eliminate uncertainty, and identify new opportunities. For example in the 1960s Wal-Mart founder Sam Walton saw the rise of self service and capitalized it before anyone else did. Consumers wanted to accept self-service in order to get lower prices. The forward-looking Wal-Mart and Kmart were rewarded with significant market share, as a result for seizing this trend long before the department stores did. (Kalakota & Robinson 2001, p.34)

Some current consumer logistics related innovations are introduced in this chapter. The goal is to understand what kind of business models have been created as an alternative for the more traditional distribution systems. Also here the idea is to understand what kind of problems do these trends or business models solve or how they serve their customers or end users. The solutions presented here are searched mainly online.

Inbound Logistics' July 2015 trend listing discusses about the strategies of Amazon and Walmart (see Amazon.com Inc. 2015; Wal-Mart Stores Inc. 2016). According to the article both of them are trying to reach the customer satisfaction but by different means. Amazon prioritizes selection and speed with an innovative, e-commerce-driven business model that features expedited delivery services. Walmart however recently revealed to test an unlimited, three-days-or-fewer guaranteed shipping service for about at half the price of Amazons similar service. Walmart has largely focused on building innovative retail formats instead of e-commerce volume. With their thousands of stores in the United States it however has a huge potential to utilize its proximity for the home deliveries and last mile competition. (O'Reilly 2015b)

One recent success story in consumer logistics is a crowdsourcing based platform Uber found in 2009. Uber is a mobile app which works as a platform to connect passengers and drivers. By using the phone's GPS Uber detects the location and connects the passenger with the nearest driver available. (Uber 2015) After this the crowdsource based business model has been utilized in different kind of ways and also in the cargo logistics and home deliveries.

Nykänen et al. (2015, p.14) point out that smaller and more agile transport equipment, such as bikes, have become more common as the delivery batches have become smaller. This is common for example in food deliveries. In Finland such companies as Foodora and Wolt recently started operating in 2015 in the restaurant delivery sector. Both of them bring together multiple restaurants under one app where the customer can order food from any of the food providers. Foodora operates in twelve different countries and lot of the deliveries are made with bikes. (Foodora Finland Oy 2015)

From Wolt's transparent mobile app the customer can follow the courier arriving. The payments take place in the background with the receipts going directly to their e-mail. (Wolt Enterprises Oy 2015) In the United States there are this type of online takeaway delivery apps to serve different needs and priorities. Some of the food delivery apps for example in San Fransisco focus on offering high quality food with higher prices, while others also make their own food and can therefore offer a lower price. (Huet 2015) Rocket Internet's global online takeaway group according to their press release (2015) forms a network of 71 countries, where it serves about 142 thousand restaurants.

Parcel2go is a site that works with some of the world's largest couriers and helps the user to send parcel to 220 countries worldwide. The site basically gathers transport providers under the same site and allows the customers to compare in order to get a best price. (Parcel2Go.com Ltd 2016)

Nykänen et al. (2015) in their article present some Finnish trends in intelligent city logistics. They talk about droid deliveries, smart containers, crowdsourcing based delivery service, and grocery deliveries as recent examples in new solutions to city logistics. Amazon and Walmart are also increasingly competitive in grocery delivery business. Although the world's largest retailer Walmart has a well-established in-store presence, online grocery delivery is a new venture. (O'Reilly 2015b)

An effective solution in last-mile logistics that attracts attention for many companies is setting up self-collection points (Geamsakul et al. 2006). Nykänen et al. (2015, p.14) also present this as one solution for the dispersion of the material flows.

Although home deliveries are appreciated by consumers, a critical issue for the parcel delivery companies to overcome is when no one is at home at the time of delivery. There are companies that try to tackle this issue, and in Japan there are delivery companies that allow consumers to choose delivery time frames that suits their needs. (Taniguchi &

Thompson 2015) Inbound Logistics 3PL Perspectives report recognized nine different innovations that will most likely impact logistics and supply chain management in the future. They list these innovations to be Internet of Things, driverless vehicles, drones, 3D Printing, RFID, embedded sensors, artificial intelligence, wearable technology, and virtual reality. (O'Reilly 2015a)

3. LEAN STARTUP

In this chapter the theory of lean startup ideology and methodology is presented. First lower chapter introduces to the ideology. Second lower level chapter illustrates the theory related to lean startup process execution. Lean startup can be utilized in different ways. This chapter is examined from the perspective that is utilized later to the case company.

3.1 Ideology

Lean startup is a business development method introduced by Eric Ries (2011). Lean startup is in the intersection of customer and agile development (Blank & Dorf 2012). It represents a synthesis of Customer Development, Agile Software methodologies and Lean practices (Maurya 2012a).

3.1.1 Overview

Lean startup strongly follows the lean principles and is a method designed specifically for startups. There are different conceptions on what a startup really means. Blank & Dorf (2012) define it as an organization formed to search for a repeatable and scalable business model. A startup angel investor, and founder of leading global venture capital seed fund and startup accelerator, Dave McClure states that startup is a company that is confused about what its product is, who its customers are, and how to make money (Birmingham 2014). Ries (2011, p.27) defines startup as an institution designed to create new products or services under conditions of extreme uncertainty. In this thesis a startup can be understood as something that fits all of these definitions. However Eric Ries' (2011) definition that emphasizes the extreme uncertainty is the most suitable in this research.

Lean startup bases its name on the lean manufacturing revolution which has gotten its origins by Taiichi Ohno and Shigeo Shingo with their development at Toyota. Origins of Lean are in Lean Manufacturing and the Toyota Production. (Ries 2011) Toyota production system is based on lean principles and includes a focus on the customer, continual improvement and quality through waste reduction and tightly integrated upstream and downstream processes as part of a lean value chain. (Liker & Morgan 2006) The traditional lean methodology determines which parts of the manufacturing or business process add value and which parts not. The parts that do not add value for the customer are then removed. (Liker 2004) One of the most important standpoints for lean manufacturing revolution is to understand which of the efforts are wasteful, and which are value-creating. In lean-thinking value is determined as something that provides benefit to the customer. Anything else besides value is considered as waste. For startups however the setting is different and not all the actions are necessarily directly valuable to

the customer. Essential part of a Startup is that it includes extreme uncertainty. Therefore who is the customer and what the customer might find valuable are both unknown. The essential unit of startup progress is learning and the efforts that are not absolutely necessary for learning what customers want should be eliminated. This is called validated learning and it should be backed up by empirical data from real customers. (Ries 2011)

Startups are not just a smaller versions of large companies (Blank & Dorf 2012). They operate with too much uncertainty to be applied such things as good plan, solid strategy, and thorough market research (Ries 2011, p.9). Business plans rarely survive the first contact with the customers (Blank 2013). Startups do not know their customer is or what their product should be. As the world becomes more uncertain, the traditional management methods are not up to the task, since the future is harder to predict. Planning and forecasting are accurate when based on a long, stable operating history or a relatively static environment and startups have neither. (Ries 2011, p.9)

Launching a new enterprise is extremely risky. The odds are not in favor as significant amount of startups fail (Blank 2013). According to Blank (2007) startups unnecessarily spend billions of dollars as they try to force their new products into markets where no one is waiting to buy. Yet time after another they return to the same processes that produces failure. (Blank 2007).

According to Ries (2011, p.56) if you cannot fail, you cannot learn. The reality of building successful product is rarely simple. Often it can includes years in the making with several incremental innovations and failures. The classic product-centric approach emphasizes some customer involvement during requirements-gathering phase but the actual customer validation is not done until after the product is released. There is a long time period when the startups disengage from the customers while they build and test their solution. During this time, which can be for critical weeks or months, it is quite possible to either build too much or digress building what the customers actually want. (Maurya 2012a) Blank (2007) describes this fundamental dilemma and offers a process for building a continuous customer feedback loop. Blank (2013, p. 69) has collected the key differences between lean startup and traditional business development methods. These are presented in the Table 2.

Table 2. What lean start-ups do differently (modified from Blank 2013, p. 69)

	Traditional	Lean
Strategy	Business plan, implementation-driven	Business model, hypothesis driven
New-product process	Product management. Prepare an offering for market following a linear step-by-step plan	Customer development. Get out of the office and test the hypothesis
Engineering	Agile or waterfall development. Build the product iteratively, or fully specify the product before building it	Agile development. Build the product iteratively and incrementally
Organization	Departments by function. Hire for experience and ability to execute	Customer and agile development team. Hire for learning, nimbleness and speed
Financial reporting	Accounting income statement, balance sheet, cash flow statement	Metrics that matter. Customer acquisition cost, lifetime customer value, churn
Failure	Exception. Fix by firing executives	Expected. Fix by iterating on ideas and pivoting away from the ones that do not work
Speed	Measured. Operates on complete data.	Rapid. Operates on good-enough data.

Lean startup makes the process less risky. It favors experimentation instead of elaborate planning, customer feedback over intuition and iterative design over traditional. Regardless of methodology being relatively new it has quickly taken root in the startup world and business schools. (Blank 2013) The principles work for organizations of any size, since it is not about being cheap and small, but about eliminating waste and moving quickly (Croll & Yoskovitz 2013). The term lean is often misunderstood as just being cheap. Fundamentally lean is about eliminating waste or being efficient with resources. In lean startup the idea is to optimize utilization of the scarcest recourse, which is time. (Maurya 2012a)

Basically the objective is to maximize learning, about customers, per unit time. This can be done by using smaller and faster iterations for testing a vision. (Maurya 2012a) According to Ries (2011) successful startups are basically the ones that manage to iterate enough times before running out of recourses. Young ventures are now testing hypotheses, gathering early and frequent customer feedback, and showing minimum viable products to prospectors, instead of executing business plans, operating in stealth mode, and releasing fully functional prototypes. This new process recognizes that searching for a business model for startups is entirely different. (Blank 2013) First applied

to new companies, lean startup is now used by organizations of all sizes to disrupt and innovate (Croll & Yoskovitz 2013).

3.1.2 Principles and Core Concepts

Lean startup assumes that it is possible to figure out most of the unknowns of a business in advance before raising money and actually executing the idea (Blank 2013). Ries (2011) introduces five principles in lean startup method. These principles are presented on the Figure 10.



Figure 10. Principles of lean startup (Ries 2011)

The first principle states that entrepreneurs are everywhere. Ries (2011) defines entrepreneur as anyone who is working within a startup. By previous definition a startup is any institution serving under conditions of extreme uncertainty. By this means the lean startup approach can work in any size company, in any sector or industry. Entrepreneurs

are everywhere, which does not limit lean startup for just a method for small companies, but it can work also in very large enterprises. (Ries 2011)

The second principle states that entrepreneurship is management. Startup is an institution instead of just a product. Therefore it requires new kind of management which is specifically geared to the context of extreme uncertainty. (Ries 2011)

Too often the founders carry hypotheses in their heads alone, which can lead solutions that just support their reality disoriented fields. (Maurya 2012a) Startups do not exist just to make stuff, make money or even serve customers. The main reason they exist is to learn how to build sustainable business. Learning can be validated scientifically by running frequent experiments where entrepreneurs can test all the elements of their vision. (Ries 2011)

Innovation accounting refers to such things as how to measure progress, how to set up milestones and prioritize work. In order to improve entrepreneurial outcomes and hold the innovators accountable a new kind of accounting is required. The type of accounting that is designed for startups and the people who hold them accountable. (Ries 2011; Lean Startup 2015) It enables the startups to objectively prove that they are learning how to grow a sustainable business. (Ries 2011, p.116)

Fifth principle refers to build-measure-learn feedback loop. The idea of a startup is to turn ideas into products, measure the customer respond and then learn whether to pivot or persevere. According to Ries (2011) all successful startup processes should be geared to accelerate Build-Measure-Learn loop. This is the process by which everything should be done, from establishing a vision to building product features, to developing channels and marketing strategies (Croll & Yoskovitz 2013). The loop is presented on the Figure 11.

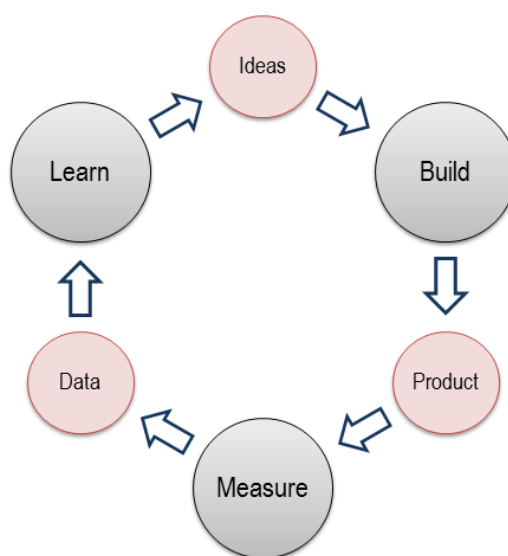


Figure 11. Lean startup build-measure-learn feedback loop (Ries, 2011)

Instead of making complex plans based on assumptions it is possible to make constant adjustments with the Build-Measure-Learn feedback loop. Through the process it is possible to learn whether to persevere along the current path or when a sharp turn called pivot is needed. (Ries 2011)

Startups have a vision, which is the destination to create a thriving and world-changing business (Ries 2011, p.22). Without vision the purpose on what you are doing is lacking. Lean startup is the process that is used to move toward and to achieve the vision. (Croll & Yoskovitz 2013, p.41) According to Cooper and Vlaskovits (2013, p.33) it is helpful to understand the driving force and the committed elements.

To achieve the vision the startups employ a strategy. Strategy includes a business model, a product road map, a point of view about partners and competitors, and ideas about who the customers will be. Products change constantly through the optimization process. Ries (2011) calls this process as turning the engine. Less frequently the strategy may have to change, and the pivot to take place. The vision rarely changes since entrepreneurs are usually committed to see the startup through that destination. These building blocks are illustrated on the Figure 12.(Ries 2011)

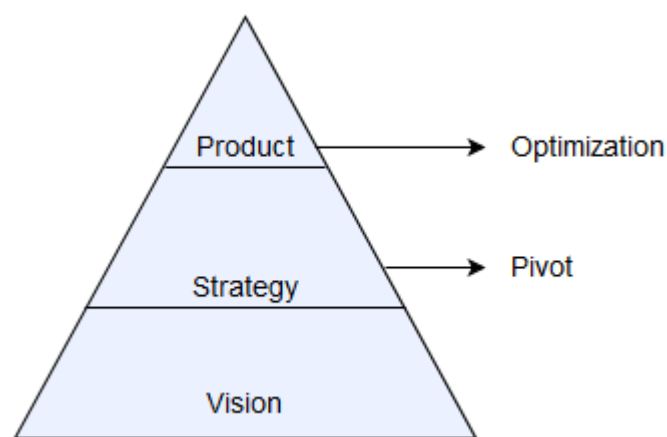


Figure 12. Lean startup building blocks (Adapted from Ries 2011, p.23)

In lean startup every single setback is an opportunity for learning how to get towards the goal. Unlike traditional strategic planning or market research process, in lean startup the specifications are rooted in feedback on what is working today rather than in anticipation of what might work tomorrow (Ries 2011, p.64)

3.2 Lean Startup Process

As presented in the previous chapter lean-startup-process builds around the build-measure learn feedback loop. This chapter illustrates adapting lean startup process in more detailed, and presents the methodologies that are used in the development.

3.2.1 Customer Segmentation

According to Cooper & Vlaskovits (2013) one of the most poorly understood concepts in business startup world is the process of segmenting the market. They also consider this as one of the most powerful concepts. Segment is a group that shares some common characteristic (Croll & Yoskovitz 2013, p.24). A market segment can be determined as a group of people who share the same pain or passion and also look into each other to refer solutions addressing this shared pain or passion. (Cooper & Vlaskovits 2013, p.61; Cooper 2014a). It is important to understand that a customer is more complicated than a single individual (Blank 2007).

According to Cooper (2014a) it is important to zoom in to individual groups of people who have the addressed need. To discover the needs that might address with the solution, it should be started to zoom in on individuals instead of large segments. Once the passionate individuals are discovered, it is possible to use the traits and behaviors to construct the market segments up from the individuals. (Cooper 2014a) In lean startup the customer segments are supposed to be divided into smaller ones. If you try to market for everyone, especially as a startup, you often end up marketing to no one. (LeanStack Inc 2015)

Olsen (2015) refers to Alan Coopers' (2004) use of personas. He introduces the usage of personas as a part of lean product process. Personas are not real people but hypothetical archetypes of actual users. Persona tool can be used to describe the target customer. They are a good way to capture the target customer in the initial design. Personas also help that everyone who is involved is aligned on the same customer. Personas help people on the team to make decision about which features are important and about how to design the user experience. (Olsen 2015)

3.2.2 Lean Canvas

To illustrate an initial business model Maurya's (2012a) has introduced a tool called Lean Canvas. The purpose of a business model is to rationalize how organization creates, delivers and captures value. Business model concept that everyone understands is needed in order to make sure that everyone is talking about the same thing and starts from the same point. Concept should be simple enough, relevant and intuitively understandable. At the same time it should not over simplify the complexities of how enterprises function. (Osterwalder & Pigneur 2010)

Based on these requirements Osterwalder & Pigneur (2010) introduced a Business Model Canvas. Business Model Canvas is a tool preformatted with nine business model building blocks. It works best when printed out so groups of people can start sketching and discussing business model elements. (Osterwalder & Pigneur 2010) In lean startup all of the nine building blocks contain a series of hypotheses that need to be tested (Blank 2013).

According to Maurya (2012a) the problem-customer segment pair is the part that drives the rest of the canvas. For this reason they are often tackled together. The idea is to list the top one to three problems that the customers need to be solved. This should be considered on the pertinent customer segment perspective. One approach is to think what jobs customers need to get done.(Maurya 2012a) It can also be done by first running 5 Whys root cause analysis and then prioritize gathering empirical evidence through customer interviews and observations. (Maurya 2015) The problem-customer segment pair is tackled together and presented in Figure 14, with more detailed instruction for filling them.

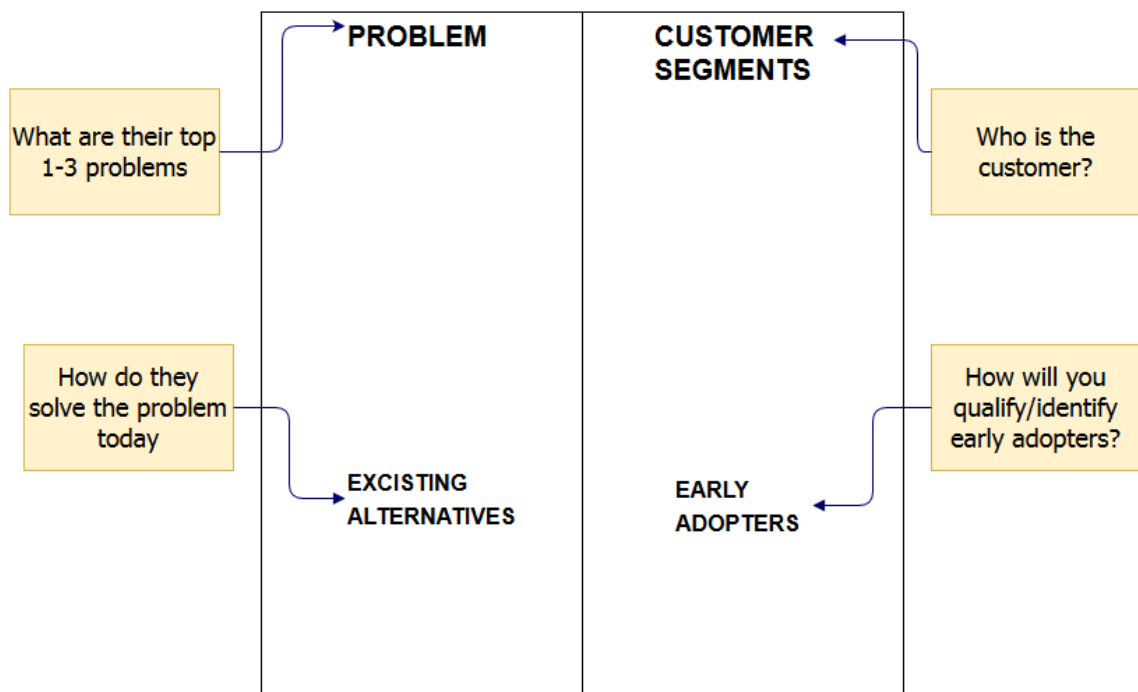


Figure 14. Problem-customer segment pair (Modified from Maurya 2015)

Defining the value proposition depends on which customers are targeted (Maurya 2012a). In this part should be determined who the customers are and also who are the early adopters. The elements of the business model can vary greatly depending on the customer segment. Instead of the mainstream customer the focus here should on the early adopter.

After identifying the important potential customer needs that could be addressed, it is needed to decide which ones the product will actually address (Olsen 2015). Value proposition is something that satisfies the customer need or solves a customer problem. It is the reason why customers choose to turn to one company instead of another one. Value proposition creates value for a customer segment through a mix of elements serving that segment's needs. (Osterwalder & Pigneur 2010, pp.22–23)

In the center of lean canvas there is a box for unique value proposition. This is the hardest box to get right but also one of the most important ones. (Maurya 2012a) According to Blank (2007) unique value proposition means a single and clear compelling message that

states why you are different and worth buying. Maurya (2012a) however states that unique value proposition should be focused on getting a prospect's attention instead of only focusing on being worth buying.

For a good product it is important that the design focus is on the set of important needs that also make sense to address together (Olsen 2015). However it is not necessary to get unique value proposition perfect right away. It starts with the best guess and is iterated from there, like everything else on the canvas. The idea is to be different but also to make sure that the difference is meaningful. Therefore the unique value proposition should be derived directly from the number one problem to be solved. (Maurya 2012a)

Most problems have existing solutions. It is also very unlikely that the pertinent problem is a brand new problem. Often the solutions may not be from an obvious competitor. (Maurya 2012a) According to Maurya (2012a) the solution should be bound as late as possible. At this point of Lean Canvas the idea is to tackle solution possibilities. It is not recommended to get carried away with fully defining solution just yet. Instead the idea is to just simply sketch out the top features or capabilities next to each problem. (Maurya 2012a) According to Blank & Dorf (2012) it is important to consider that does the solution solve the problem in a compelling way.

It is critical to start finding, building and testing significant path to the customers from the early beginning. (Maurya 2012a) The idea of the channels section is to consider how to get the product or service to the customers, and their money back to the company (Croll & Yoskovitz 2013).

Simultaneously one of the most complicated and important things to get right is what to charge for the product. In addition of keeping in business, the pricing model also signals the branding and positioning. It also is part of the product and determines the customers. (Maurya 2012a) In this stage should be considered that where does the money come from and will it be one-time or recurring. Once the general specifications are known it is possible to develop an understanding on the cost structure (Chesbrough 2006, p.67).

The idea of key metrics box is to know what numbers to track in order to understand if progress is made (Croll & Yoskovitz 2013). In startup it is often hard to determine which metrics are critical to the business, since it is hard to determine what the eligible business is. The analyzed activity is changing frequently and the target audience is still relatively unclear. The purpose of analytics in startup is to find the way to the right product and market before the money runs out. (Croll & Yoskovitz 2013)

Unfair advantage section is proposed to be the last box to fulfil. It is often one of the hardest parts to get right, and most of the founders list something as competitive advantage that really is not (Maurya 2012a). What factor makes the efforts to have greater impact than the competitors is something that should be considered in this part (Croll & Yoskovitz 2013). When filling the lean canvas it is possible to leave the unfair advantage

box blank. But it is important to think about how to make something different and also to make the difference matter. (Maurya 2012a)

3.2.3 Building the Hypotheses

Engineers are talented at improving products' performance and designers are talented at making products easier to use. The common perspective is that as long as we are executing the plan well, hard work yields results. However the products improvement tools do not work the same for startups, because if you are building the wrong thing, optimizing the product or its marketing will not yield significant results. (Ries 2011, p.126)

Product hypotheses is consisted of initial guesses about the product and its development (Blank 2007, p.41). In lean startup the experiment is more than just a theoretical inquiry. The experiment is also a first product and its success determines whether to get started with the campaign. This means enlisting the early adopters, adding employees to each further experiment or iteration, and eventually starting to build a product. This enables that by the time the product is ready to distribute widely, it already has established customers. (Ries 2011, pp.63–64)

Designing effective experiments is one of the most important skills in lean startup practice. Always critical for the experiment is that the important customer behavior should be measured. Focus should be on the behaviors that the customers must exhibit for the idea to succeed. Experiments should be made on the target customer segment and survey should not be considered as an experiment. (Maurya 2012a)

According to Maurya (2012a, p.8) the key question in the first stage is to determine whether you have a problem worth solving. This according to him boils down to three questions that are:

- Is it something the customers want? (must-have)
- Will they pay for it? (viable)
- Can it be solved? (feasible)

Based on this the idea is to derive the minimum feature set to address the right set of problems, which is also known as the minimum viable product (MVP). (Maurya 2012a) MVP is the version of the product that enables a full turn of the build-measure-learn loop with a minimum amount of effort and the least amount of developed time. Once the leap-of-faith-assumptions are clear, MVP should be entered as quickly as possible. (Ries 2011, pp.76–77)

Instead of trying to find the average customers, the point is to find the early adopters - the customers that feel the most acute need for the product. The early adopters are usually more forgiving for the mistakes and especially eager to give feedback. (Ries 2011, p.62)

3.2.4 Getting out of The Building

One of the most important aspects is to know your customers. There is no substitute for engaging with customers and users directly (Blank 2007; Osterwalder & Pigneur 2010; Ries 2011; Cooper & Vlaskovits 2013; Croll & Yoskovitz 2013; Cooper 2014a). Customer development is a term by Blank (2007) that is used to describe the parallel process of building continuous feedback loop with customers throughout the product development cycle (Maurya 2012a).

The reality for a lot of companies is that their product introduction methodologies are focused on activities inside the company's own office. The customer input may be a checkpoint or 'a gate' in the process but is not however the driving force. (Blank 2007) The greatest risk and cause of failure in startups is usually not in the product development but in the development of customers and markets. The existing challenge of finding market and understanding the customer is the same for a large company as for a new startup. (Blank 2007) Although customers hold the answers, it is not as simple to ask them what they want, because in a lot of cases customers do not know it. This however does not mean that it would be hopeless to talk to the customers because they do not clearly know what they want. The customers can articulate their problems, and then the company comes up with the solutions. (Maurya 2012a)

It is important to listen to the potential future customers and to go out in the field to investigate the potential needs and market. The key is to do all this before being inexorably committed to a specific path and precise product specs. (Blank 2007) In lean startup this is usually done with "get out of the building" approach called customer development. The idea is to test the hypotheses by going out and asking the potential users, purchasers, and partners for feedback on all elements of the business model. This includes product features, pricing, distribution channels, and affordable customer acquisition strategies. (Blank 2013)

Majority of companies recognize customer service as an important aspect of their business. However a lot of them find it difficult to describe what they exactly mean by customer service or what is the definition of the customer service measures. (Rushton et al. 2010) In network based business, besides recognizing own competences, it is important to recognize the competences of all the parties involved. It is possible to create new competence and service concepts by combining the kind of services and elements that provide added value to the customer. (Helander et al. 2013)

Acquiring a deep understanding on customer needs and combining that knowledge with incremental and iterative product development is done by getting out of the building. So-called 'out of the building approach' is based on the assumption that there are no facts inside the building, so you have to get outside. Facts live outside the building where customers are living and working. (Blank & Dorf 2012) Maurya (2012a, pp.71–72) suggests in this stage to avoid surveys. He says that surveys often assume you know the right questions to ask although you really want to explore something that you do not even know is not known. The best initial learning comes from open questions, although surveys can be used later to verify qualitative information. (Maurya 2012a, p.72)

Blank refers to the most important customer group that will ever be known as earlyvangelists (Blank 2007; Blank & Dorf 2012). Somewhat similar customer type is the early adopters described by Maurya (2012a) and Ries (2011). This thesis will use the term of early adopters. Before the products can be sold to the mass market successfully, they have to be sold to the visionary early customers called early adopters. They are determined as the people who feel the need for the product most acutely. They are more forgiving on mistakes and especially eager to give feedback. (Ries 2011)

3.2.5 Experiment and Measure

For running the experiment assembling the right team is important. Instead of traditional departments Maurya (2012a) suggests to have a single Problem/Solution team the ideal size is two to three people. In a small team communication is easier, you build less and keep the costs low. More important than the number of the members is ensuring that you have the right talents within the team for quick iterating.

Running an optimal experience requires speed, learning and focus. When formulating an experiment it is efficient to stay focused on a single individual key learning or learning metric you need to achieve. This varies by the product stage and type. In the experiment it is optimal to try to find smallest thing possible to learn. Once you truly understand the riskiest part of the product, it is often possible to build something other than the product to test it. (Maurya 2012a, pp.60–63)

Innovation accounting enables startups to prove objectively that they are learning how to grow a sustainable business. It starts with turning the leap-of-faith-assumptions into quantitative financial model. Marketplace success depend primarily on the network effects that make it the premier destination for both buyers and sellers to transact business. Sellers want the marketplace with the highest customers and buyers want the marketplace with the most competition among sellers. For this kind of startup an important thing to measure is that the network effects are working, as evidenced by the high retention rate of new buyers and sellers. If people stick with the product with very little attrition, the marketplace will grow no matter how the company acquires new customers. (Ries 2011, pp.116–117)

To apply the scientific method to a startup, it is important to identify which hypotheses to test. Leap-of-faith-assumptions are the riskiest elements of a startup plan. These are the parts on which everything depends and should be connected to the value hypothesis and growth hypothesis. Value hypothesis tests whether the product or service really delivers value to the customers once they are using it. Growth hypothesis tests how new customers will discover a product or service. (Ries 2011) A business plan rests on a series of leap-of-faith-assumptions, each of which can be tested empirically (Maurya 2012a).

According to Maurya (2012a, p. 62) a testable, falsifiable hypothesis is the kind of statement that can be clearly proven wrong. If you skip this step, you can easily accumulate just enough evidence to convince yourself that your hypothesis is correct. Hypothesis should in a form that has a specific and measurable outcome, but it is also based on a specific and repeatable action that makes it testable. Even if the expected outcome fails, the mere action of declaring it up front is hugely valuable, not only for enforcing reality check but also for improving the judgement. Maurya suggests the formula for the hypothesis that is written in a form of:

- *Falsifiable Hypothesis = [Specific Repeatable Action] will [Expected Measurable Outcome]. (Maurya 2012a, pp.62–63)*

In lean startup model experiment is also the first product, so it is more than just a theoretical inquiry. Ries (2011, p.64) says that in the development he emphasizes the four questions:

1. Do consumers recognize the problem you are trying to solve?
2. If there was a solution would they buy it?
3. Would they buy it from us?
4. Can we build a solution to that problem?

For innovation accounting Ries (2011) suggests three steps. First is to use a MVP to establish real data on where the company is right now. Second is to turn the engine from the baseline towards the ideal. This may take few attempts. After the startups had made all the small changes and optimizations possible towards the ideal, it has to make a decision whether to pivot or persevere. (Ries 2011)

3.2.6 Learn

Lean startup allows startups to build something, measure its effects, and learn from it to build something better next time. You can iterate quickly and decide early on whether to double down on your idea or fold and move to the next one. Learning does not however happen accidentally but it is an internal part of the lean process. (Croll & Yoskovitz 2013) Before the product/market fit the terrain is filled with extreme uncertainty, but still you don't need a lot of data to learn in lean startup process. The initial goal is to get a strong

signal, that can be either positive or negative, that typically does not require a large sample size. Maurya (2012a) suggests that even as few as five customers can sometimes be enough. He says that a strong negative signal indicates that your bold hypothesis most likely won't work and lets you quickly refine or abandon it. On the other hand, a strong positive signal does not necessarily mean that the hypothesis will scale up to statistical significance. That however gives the permission to move further on the hypothesis until it can be verified later through quantitative data. Maurya suggests that hypotheses should be validated first qualitatively, then quantitatively. (Maurya 2012a, pp.63–64)

One of the hardest things is to correlate the measured actions back to specific and repeatable actions, as the product is always changing. Testing a hypothesis can be scary for founders that have put a lot of effort to their work. However without a level of transparency and objectivity there is a risk of running the startup just primarily on faith. (Maurya 2012a)

The idea is that the learning is communicated early on and often, for example with dashboards. The communicating process is what keeps you grounded in learning while constantly iterating toward a plan that works. The first significant milestone is achieving the product/market fit, which is not just about building the right product but building a scalable business model that works. The idea is not to aimlessly follow the process and run the experiments just for the sake of learning. (Maurya 2012a, pp.64–65)

4. OPERATIONAL ENVIRONMENT

This chapter gives an overview on the operational environment of C2C business and the case organization Tori. In its first sub-chapter an overview on circular economy is presented in relation to the research topic. Second chapter studies the C2C e-commerce in more general level. Third chapter is an overview of the case company and its consumer operations.

4.1 Circular Economy

According to European Commission the linear model of economic growth that has been relied in the past is no longer suited for the needs of today's modern societies in a globalized world. The future cannot be built on the 'take-make-dispose' model. (European Commission 2015b) It is a model that is reaching its physical limits, as it relies on large quantities of cheap, easily accessible materials and energy (Ellen MacArthur Foundation 2015a). To ensure sustainable growth for the EU the usage of resources has to happen in smarter and more sustainable way (European Commission 2015b)

Circular economy is a continuous positive development cycle that preserves and enhances natural capital, optimizes resource yields, and minimizes system risks by managing finite stocks and renewable flows (Ellen MacArthur Foundation 2015a). Circular economy is a model where the materials and value circulate, and the value is topped up with services and intelligence (Sitra 2015a)

In a circular economy the value of products is maintained for as long as possible, in a way that waste and resource use are minimized. The resources are kept within the economy when a product has reached the end of its life, to be used again and again to create further value. (European Commission 2015b) In December 2015 European Commission adopted an ambitious new Circular Economy package to help the businesses and consumers to make the transition to a stronger and more circular economy. The proposed actions include greater recycling and re-use, and bring benefits for both the environment and economy. (European Commission 2015a) Activities over the several years also show that circular economy is emerging as an economic strategy rather than purely environmental strategy (Yuan et al. 2006). Essentially it is an ecological economy that follows the principles of 'reducing, resource use, reusing, and recycling' (Zhijun & Nailing 2007).

According to evaluation of Sitra (2015a) circular economy in Finland has potential to increase the value of economy for about 1,5-2,5 billion euros. Most of the circular economy potential is not in the material flows or waste. Instead, the areas to be utilized efficiently are more likely maintenance, re-usage and re-production. (Sitra 2015a)

According to Waste and Resources Action Programme (2014) significant economic benefits can be gained from developing a more circular approach to clothing. They have released a Sustainable Clothing Action Plan (2016) that aims to bring together industry, government and the third sector to improve the sustainability of clothing across its lifecycle.

Finnish consumers often own clothes more than is necessary for them. The textile recycling is complex and requires a lot of manual work. It easily becomes economically unproductive. The textile industry examples of lengthening the product life cycle are flea markets, or preparation and renting of the clothes. (Sitra 2015b) Although Finland has come a long way what it comes to executing circular economy, about 54 percent of the waste is not being utilized in any way. There are no innovative service concepts for example related to equipment maintenance, re-usage or re-production. (Sitra 2015a)

Based on a report consult company Circle Economy (see Circle Economy 2015) made for Sitra (2015b) new business models and adaptations of circular economy have been emerging in the world. The report information was gathered from 250 different companies who execute the circular economy in different ways. Different ways of executing circular economy in the textile industry were divided to three classifications. These main categories are called ‘circular’, ‘servitization’, and ‘sufficiency’. In the circular category the companies are create business by better utilization of the products and materials. An example of this is a Swedish clothing brand Filippa K, which accepts used items in Stockholm, and then sells them in their own second-hand store. In ‘servitization’ category the emphasis is on services such as maintenance, renting and paying for the results. As an example of this they present Danish Vigga, which delivers clothes suitable for babies and small children for a 50 euro monthly subscription. ‘Sufficiency’ category the emphasis is on the smart utilization of the existing resources, which in the textile industry emphasizes on minimizing the amount of unsold items in different ways.

According to the report by Ellen MacArthur Foundation (2013, p.8) there are profitable circular opportunities to reuse end-of-life for clothing. The report suggests that clothes can be worn again or also be cascaded down to other industries to make insulation or stuffing, or simply recycled into yarn to make fabrics that save virgin fibers. According to the report the collected and sorted clothing can generate gross profit of USD 1,295 per ton. The number is based on the revenue evaluation of USD 1,975 per ton, subtracted with the USD 680 collection and sorting cost per ton. They also see an opportunity in expanding the “clothing-for-hire” segment into everyday clothes. (Ellen MacArthur Foundation 2013)

4.2 C2C E-commerce

There has always been consumer-to-consumer (C2C) networks. Consumer-to-consumer (C2C) means denoting transactions conducted via the Internet between consumers

(Oxford University Press 2016). Their significance has grown because of the digitalization. (The Federation of Finnish Commerce 2016) In recent decade the C2C e-commerce has developed extremely fast and gained significant role in internet transactions (Tian et al. 2015). This chapter describes the C2C commerce and consumer behavior as a part of the e-commerce environment.

4.2.1 Consumer Behavior

One of the most important aspects in C2C e-commerce is trust. E-commerce can still be relatively new concept for a lot of people, and trust increases with familiarity. In C2C e-commerce, trust must be felt by both buyers and sellers and they must both be trustors and trustees. (Jones & Leonard 2008) More and more consumers are acting the role of reseller by taking advantage of the C2C sites. Such actions may involve new behaviors created by technology. (Chu 2013) The changes in the operational environment, also makes the companies want to be where the transactions happen. (The Federation of Finnish Commerce 2016)

The consumers are buying especially more and more fashion from the other consumers. Quality and cheap price create a combination that specifically attracts the consumers. Jaana Kurjenoja states in the Federation of Finnish Commerce article (2016) that price is in significant role what it comes to C2C e-commerce. Price however is not the only factor. Such things as communality and ecological trends are important influencers.

Ehrnrooth and Gronroos in their article (2013) refer to a new kind of phenomenon affecting for the marketing of goods and services. They are talking about a hybrid consumer, which is a consumer type that does not fit into any particular market segment defined in traditional market literature. Hybrid consumer buys cheap generics and low-end brands on some occasions, and then on the other purchase occasions change to premium, high-end brand and happily pays for them. (Ehrnrooth & Gronroos 2013) In Tori they acknowledge that normal consumers from every income bracket search and buy both new and second-hand items online. According to their CEO Jussi Lystimäki the Finnish consumption has changed drastically and people are not buying second-hand just for ecological reasons or lack of money. He says that the hybrid consumption where new and second-hand items are combined has become common. (Tori.fi 2015b)

4.2.2 C2C and E-commerce in Finland

E-commerce in Finland is growing steadily. In the first quarter of the year 2015 people in Finland spent 690 million euros on online shopping. (Suomen Ostojen ja Logistiikkayhdistys LOGY ry 2015) According to statistical report by TNS Gallup, The Federation of Finnish Commerce, and Finnish DMA (2015) Finnish people spent 4.7 billion euros on products and 5.7 billion euros on services online in the year 2014. Their

statistics takes into account Business-to-consumer (B2C) commerce with taxes and delivery costs. The requirements in delivery time vary in the Nordic countries.

In Finland the second-hand C2C commerce has grown from a marginal event to a large phenomenon which is widely accepted among consumers (The Federation of Finnish Commerce 2015). According to the research of Federation of Finnish Commerce (2015), out of the people who buy or sell second-hand items in consumer-to-consumer networks, do that more than five times a year. Such sharing platforms as Uber and AirBnb are still quite uncommon in Finland (The Federation of Finnish Commerce 2015).

According to a recent C2C commerce research of The Federation of Finnish Commerce Tori.fi and Huuto.net are the biggest peer-to-peer marketplaces. Tori is the most popular commonly used C2C marketplace for the consumers, according to the responds. After Tori and Huuto the most common place for peer-to-peer commerce are social media groups in Facebook. Most of the other services mentioned in the research are focused on some specific product like cars or books. (The Federation of Finnish Commerce 2015) According to Tori (2015a) the C2C services balance between locality, focus, and selection.

The C2C e-commerce for fashion is currently growing extremely fast, according to the Federation of Finnish Commerce (2016). They evaluate the value for the C2C commerce of clothes, shoes, accessories, bags, and children products to about 100 million euros in Finland. This is about the fifth for the whole value of the C2C e-commerce.

4.2.3 Examples of C2C Logistics

In Finland Tori is the leading classified ads service (SCM Suomi Oy 2015b). There are also other sites that offer C2C transaction platform for the consumers. Few of them also offer consumer deliveries on different types of business models. In C2C logistics there are no fixed business models or established practices. Different types of models are emerging. This chapter describes some of them focusing on the second-hand C2C marketplaces.

Tori have experimented crowdsourcing based logistics platform with Coreorient Oy's PiggyBaggy (2015). PiggyBaggy is crowdsourcing based online platform where consumers can leave pick-up proposals but also sign up to deliver someone else's item. According to Tori representors there are not really widely spread ways of working or standardized courses of action in classified services logistics. They say that Tori have had plans on possible co-operation with postal package services in Finland, but so far they have not studied the opportunities and issues, or made decisions over it.

Schibsted Classified Media has consumer delivery services for example its Hungarian and Swedish subsidiaries Jófogás and Blocket. (see Jófogás.hu 2015a; Blocket.se 2015a).

In Jófogás their country-wide delivery service is executed in collaboration with a transportation company GLS. The seller alerts the pick-up need before the buyer has been found. The seller already decides to sell “a pick-up product” when creating a selling ad. This enables the seller to get the listing in the whole country and to reach more potential buyers. Once buyer has been found the seller is contacted to accept the pick-up request. This amount is subtracted from the amount in which the item is sold. Therefore the seller is charged for the delivery after the item is sold. The delivery is free for the buyer, but seller basically pays for the increased visibility for the product. They deliver packaged parcels up to 40 kg and the delivery price is about six euros (1900HUF). (Jófogás.hu 2015b) In Sweden Blocket offers a package service in collaboration with transportation company Schenker. After seller and buyer mutually agree on the conditions and the price that the buyer pays, they will fill the required information to the reservation form. The seller can print the package slip online and take the package with it to the nearest DB Schenker delivery point. The item will be sent to the nearest DB Schenker delivery point where the buyer picks it up from. The buyer has 24 hours to check that the item fits the description and possibility to return it. (Blocket.se 2015b)

Huuto.net is online auction site for consumers by Sanoma Media Finland Oy (2015). They offer a delivery service on co-operation with Finnish post and Matkahuolto. This service works in quite similar principle than the previously described Blocket's delivery service. The seller takes the delivery to the nearest delivery point and the buyer picks it up from another one. In Huuto.net the delivery is purchased after the buyer is found and the seller pays for it. They offer deliveries for different sized of packages and their prices vary between 5.95 and 15 euro. (Sanoma Media Finland 2015)

Another type of example in Finland is a company called Suomen Nettikirpputori Oy (2015) that operates with a different kind of distribution center model. The seller sends takes the items to the nearest Matkahuolto delivery point and sends them to the central warehouse of the company. All of the products sold are physically located in one central warehouse from where the buyer can choose any items. With one delivery charge the buyer can purchase from as many sellers as wished. The sellers do not have to answer user questions or send the products to different buyers. The company does this for the customer and accounts the sales revenue to the seller if the products are being sold. If the items are not being sold the company can return them to the buyer for a price of the postal fee. They charge 6.90 euros for the delivery. (Suomen Nettikirpputori Oy 2015)

Craigslist is a community with classified and forums and it has over 700 local sites in 70 countries. According to their site they have 60 million monthly users in the United States alone. Users post over 80 million classified ads each month on Craigslist. (Craigslist 2015) They do not offer shipping on their site, but there are some providers that offer deliveries or discount on their service for specifically craigslist items. uShip is a service where the consumer can compare and bid different carriers in order to get the best price for their delivery. It collects independent truckers and largest freight carriers on its site

and by competing bids they can win the customer delivery for their self to take care of. After receiving bids the customer can accept any of them based on such things as the price, delivery time frame, feedback score, and customer reviews. (see uShip Inc 2015)

Gone is a company operating in the United States. They offer a service where the consumer can take a picture of their sold product, and the company takes care of the rest. Gone concierge comes to the seller house, picks up the item, packages it, sells it, and ships it, simply mailing the seller a check when the process is complete. (Crook 2016) This concierge service is available in San Francisco, Austin, Boston, Seattle, and New York. Gone also offers another option nationwide, where it ships the boxes and packaging materials for free to the consumer door. Then the consumer will take it to the drop-off box. Gone does not buy the items from the consumer, but sells them optimizing the marketplace based on the price and demand. They charge a commission ranging from 7% to 15%, that includes inspection, pricing, postage, and packing materials. If the items are not sold in 90 days they send them back to the seller for free, or extend the period for another 90 days. (Gone 2016)

EBay also offers a service with similar logic called eBay Valet. It is an app that takes every step of the selling process and handles it for the consumer. It is designed to make online selling easier and more approachable, not only for the first-time sellers, but also for the ones who do not have time to handle the listings by their selves. (Perez 2014) eBay has a listing on what products they accept and what they do not. They for example do not accept poor condition, fragile, bulky, or less than USD40 current selling value items. They do not charge the seller for the shipping but they take commission between 20% and 40% depending on the sale price of the item. They charge the buyer for the shipping whenever the item is sold. They use mail-in and drop-off box options for the shipping. (eBay 2016)

The seven marketplaces presented here have delivery models that are all more or less different to each other. On the Table 3 the key points of the seven second-hand C2C logistics execution is gathered.

Table 3. Examples of C2C logistics operations models

	Seller pays shipping	Buyer pays shipping	Door-to-door delivery	Drop-off point	Details
Jófogás.hu	x		x		Seller gets more visibility
Blocket	x			x	Collaboration (DBSchenker)
Sanoma Media	x			x	Finnish Post & Matkahuolto
Suomen Nettikirpputori	x	x		x	Distribution center
uShip (Craigslist)	(x)	(x)	x		Carriers bid
Gone	(commission)		x	x	Concierge for some locations
eBay Valet	(commission)	x		x	Full-service for some items

The table illustrates all of the seven C2C marketplaces discussed in this chapter in their own rows. The options that are fulfilled are crossed in the table. The first column is marked if the seller is the payer of the delivery, and the second one if the buyer. For the first three marketplaces the seller is the payer of the shipment. The buyer can also pay something from the delivery directly to the seller, but it is between them to agree on. In the fourth distribution center solution both pay for the shipment. In the last option either of the parties can pay for the shipment, since the uShip service is a separate platform from the Craigslist. For Gone and eBay the seller pays a commission for the service. Gone says that this also includes shipping, but eBay Valet says that they charge the shipping from the buyer. Jófogás, uShip, and Gone offer door-to-door delivery, and the others use drop-off points. The last two options are more of a full service solutions. In them the work done by the consumer is minimized.

4.3 Tori Market Place

In 2014 Tori was visited 162 million times. In total 5,6 million ads were left and the amount of ads grew 60 percent from the previous year 2013. (Tori.fi 2015b) This chapter focuses more on Tori as a consumer transaction platform.

4.3.1 Operations and transactions

Tori is part of an international business entity and belongs to Schibsted Media Group (SCM Suomi Oy 2015b). Schibsted Media Group has operations in 30 different countries. Schibsted Media Group strategically focuses on classifieds, growth, and media houses. These three elements work seamlessly together and are building blocks of their strategy to become a global leader within their field. (Schibsted Media Group 2014)

The focus of tori is on the C2C commerce of the secondhand items. The company provides a platform for the classified ads C2C transactions. There are also listings for business transactions but the main focus is on the consumer actions. Basically anyone can sell or buy items in Tori. The listings are moderated by Tori staff before publishing to ensure proper quality. Listings can be anywhere in Finland and the product can be anything from household items to motorbikes. Tori can be used with three different user interfaces, which are the desktop site, mobile site, and the mobile app.

Tori has certain core values and building blocks. Tori wants to provide easy and good transactions between consumers. It aims to be a platform that is easy to approach for everyone. It does not have mandatory registration or other troubling factors. Tori is safe, and the ads are verified. It is a C2C platform and a marketplace for the everyday life of people. (Tori.fi 2015a)

In Tori the user can either sell, buy, do both, or none of these. One way to divide Tori users is by their adoption towards the service. Divided this way Tori recognizes four different user types which are:

- Non-users
- Moderate seller only
- Strictly buyers
- Super users.

These user groups can have different type of needs and barriers. The super users have a very high probability of future usage and they are by far the most important group in terms of volume.

The Figure 15 illustrates a simplified overview on the current options for the physical transaction of goods in Tori. B on the left side represents the buyer and S on the right the seller. The arrow color represents which party has to put direct effort on the actual moving of goods.

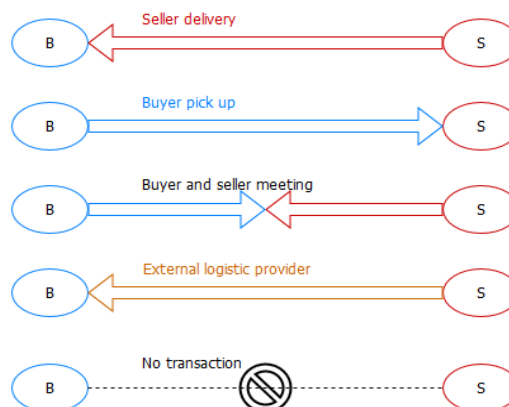


Figure 15. Simplified overview on buyer-seller transaction options

In the first case on the Figure X the seller takes the purchased item to the buyer. In this case the seller has to put effort to the delivery. On the second option the buyer picks the item from the seller. The third option is that the seller and buyer organize a meeting to change the ownership of the item. In the fourth option buyer or seller organize an external logistic provider or postal service to take care of the physical transaction. In the last option there is no transaction which means that the buyer and seller cannot make a both-satisfying agreement on delivery of the product. All of these options currently require effort from either the seller, the buyer or both. The situation that would be ideal for the consumer is on the Figure 16.

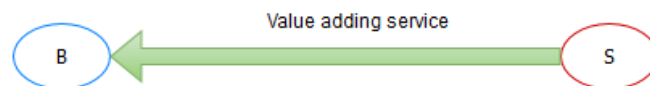


Figure 16. *Simplified ideal buyer-seller transaction*

Instead of consumers organizing the deliveries by their selves the idea is that Tori could offer a value adding service between the buyer and seller transaction.

This type of consumer marketplace environment has a lot of challenges from a logistics point of view. A lot of important information will not be known until the actual transaction agreement is made between the consumers. In this kind of business model, inventory or warehousing cannot be perceived same way as logistic systems in general. Manufacturing also is not a part of the logistics chain in this case. Focus on the development is on the distribution network and on how the product is moved from the seller's house all the way to the buyer. Because of the operational environment it is necessary to understand the problem more extensively than view it just as traditional supply chain development or redesign process.

4.3.2 Categories

The transaction items can vary from each other significantly which creates challenges for the distribution system. The idea of this chapter is to understand what kind of limitations or requirements the products might have for the distribution concept. Tori's listings include several different categories. Tori has the following seven main product categories:

1. Cars and Equipment
2. Housing
3. Home and Living
4. Free Time and Hobbies
5. Electronics
6. Employment and Business
7. Other

Out of these main categories the Home and Living category is the most popular category. At the time of examination (2015), and based on the report from 2013 (Tori.fi 2014) this

category covers more than 55 percent out of all the products. For the reference, the division of listings in different categories is illustrated in the Figure 17. (SCM Suomi Oy 2015a)

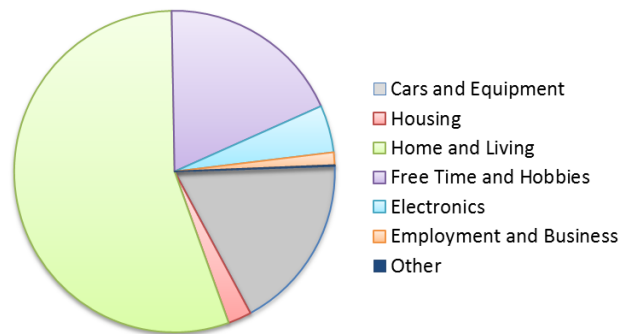


Figure 17. Division of Tori categories (Modified from SCM Suomi Oy 2015a)

The six first product categories cover most of the listings. The Other category includes products that do not list under any other specific category and only includes about 0,1 % of the listings, which is also why it is barely visible on the figure.

All these categories include sub categories where the listings are divided more detailed. On the Table 4 below the more detailed categories are presented (SCM Suomi Oy 2015a).

Table 4. Sub-categories and their relevance for the project

Home and Living	Cars and Car Accessories
domestic appliances	cars
kitchenware and dishes	car accessories and spare parts
decoration and furniture	traveling vehicles
yard and garden	traveling vehicle accessories
clothing and shoes	motor cycles
accessories and watches	motor bike accessories and spare parts
children accessories and toys	lifting and transport equipment
building and renovating	boats
	boat equipment and spare parts
Free Time and Hobbies	Housing
sports and outdoor	recidences
biking and accessories	vacation recidences
music and instruments	lots and farms
hunting	garages and warehouses
fishing	residences abroad
movies	
books and magazines	
pets	Employment and Business
horses and equestrian sports	vacancies
traveling	CV
collection	services
handicrafts	agriculture
photography	construction services
other hobbies	for companies and businesses
Electronics	Other
telephones and accessories	other
entertainment electronics	
information technology	

On the Table 4 the color describes the relevance of the product. In this thesis some of these product categories can be considered irrelevant for the topic. In the table the relevance is considered from transportation point of view. For example such products as real-estates and jobs are not observed here since they are not products that can be physically transported.

The green colored categories are considered possible products for transporting and therefore relevant for this thesis. The dark grey colored categories are considered irrelevant for the logistics examination. These items are either impossible to physically distribute or too complex products to consider in this thesis. Light grey colored products are considered relevant, but with some observations. This means that the products are possible for transportation but the products are complex or can have some features that

are challenging from the logistics point of view. The decisions are made based on the product nature and its suitability for transportation.

Housing and Employment categories are therefore considered to be irrelevant for this thesis. From the Cars and Car Accessories category the Cars part is also considered irrelevant. Cars are not impossible to transport but in this case it is considered too challenging in many aspects to begin with. Car accessories can be considered possible products for delivery by some extent.

From the logistics perspective the products and listings include a lot of different variables. The size, weight, material, complexity, vulnerability, and style of product can vary drastically, also inside a product category. People can have relative understanding on these aspects. Products can be located anywhere in Finland and their destination can be at any place.

Since there is a lot of uncertainty related to the topic, this thesis will focus on the categories that are the easiest to approach. Home and Living, and Free Time and Hobbies, are considered to be the most important categories related to the topic. As illustrated in the Figure 17 these two categories together cover more than 70 percent of the overall listings. Their lower level categories that this thesis is focusing on are collected on the Figure 18 below.

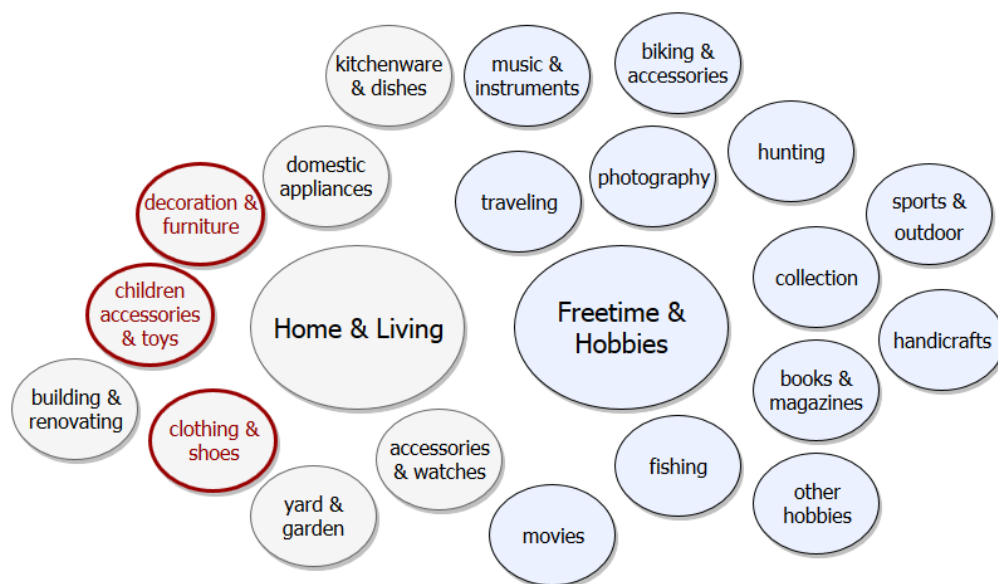


Figure 18. *The most popular categories in Tori*

The most popular categories sold in Tori are the Decoration and Furniture, Clothes and shoes, and children accessories and toys. In 2014 these three categories together formed over half of the 5.6 million ads in Tori. (Tori.fi 2015b) They are also emphasized on the Figure 18.

The product types are also initially divided into four different categories. The idea of this categorization is to support the development process. The categories are presented in the Figure 19.

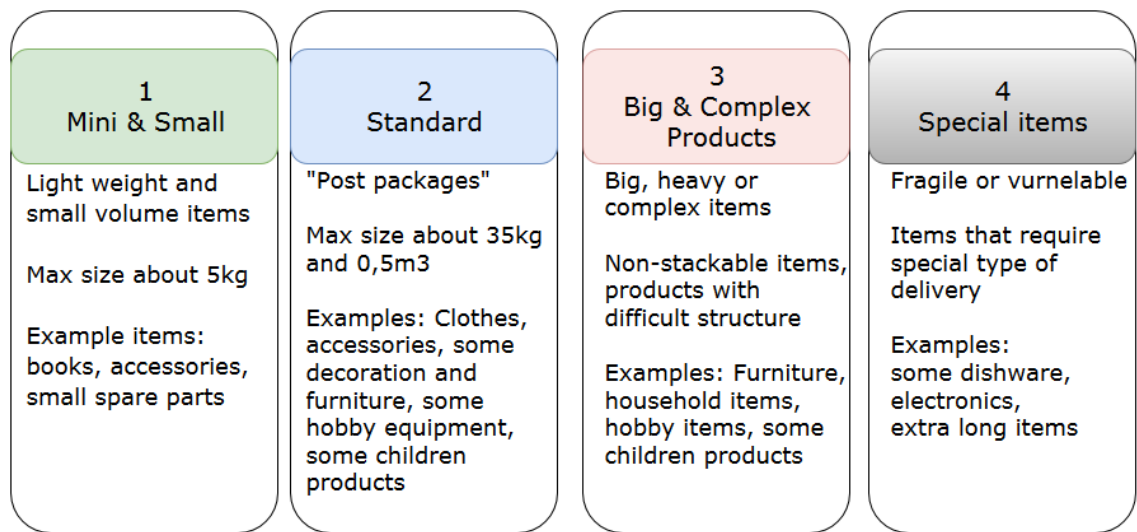


Figure 19. Initial categories based on logistics complexity (Adapted from United Parcel Service of America 2013; Posti Group Oyj 2015; Matkahuolto 2015).

These categories are based on size, complexity and handling requirements of the product from logistics perspective. Most of the products this thesis is considering are most likely in the product section 2 or 3. At this point the division was made based on the product categories of tori, but also with a reference of the current package requirement and offerings of UPS, Finnish post services, and Matkahuolto (see United Parcel Service of America 2013; Posti Group Oyj 2015; Matkahuolto 2015).

5. LEAN STARTUP DEVELOPMENT PROCESS

This chapter explains the execution of the empirical part which emphasizes the lean startup principles. First the description of the empirical part is explained. This is followed by the workshop preparation that the researcher has made before the workshop. Third lower level chapter describes the workshop that was being held. After that quantitative mobile site experiment execution is presented. This is followed by a chapter that explains the consumer interviews, and another chapter that presents the results and analysis of the interviews.

5.1 Description of the Empirical Part

The empirical part will follow strongly the lean startup principles and the process structure illustrated earlier in this thesis. The data collection elements, presented in the introduction part of the thesis, are tackled together the build-measure-learn parts in the Figure 20.

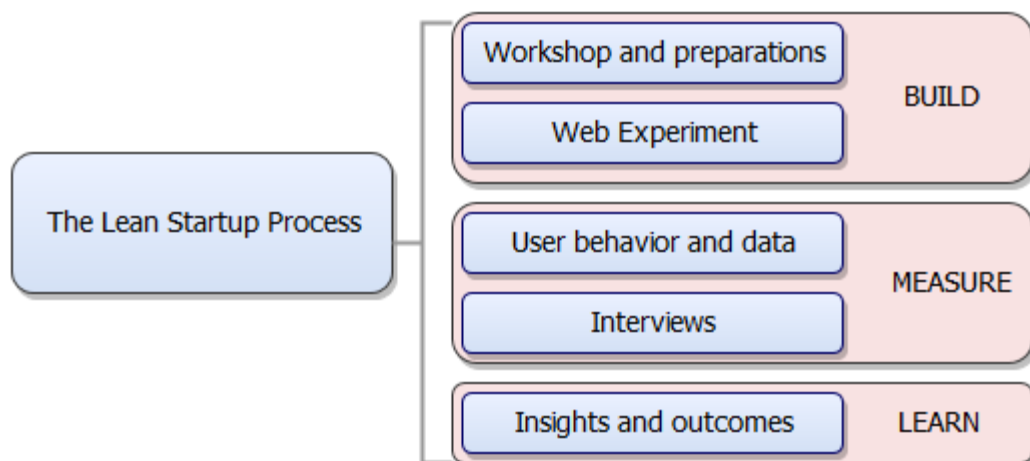


Figure 20. Lean startup process data collection elements

The division between the elements is not strict but it gives an overview on how different parts of the data collection are related to the lean startup. For example the user behavior is also analyzed when building the hypotheses in the workshop preparation part.

Below on the Figure 21 the progress of the different sections is illustrated as a linear process in their performing order. It includes the different main stages of the development process focusing on the empirical part.

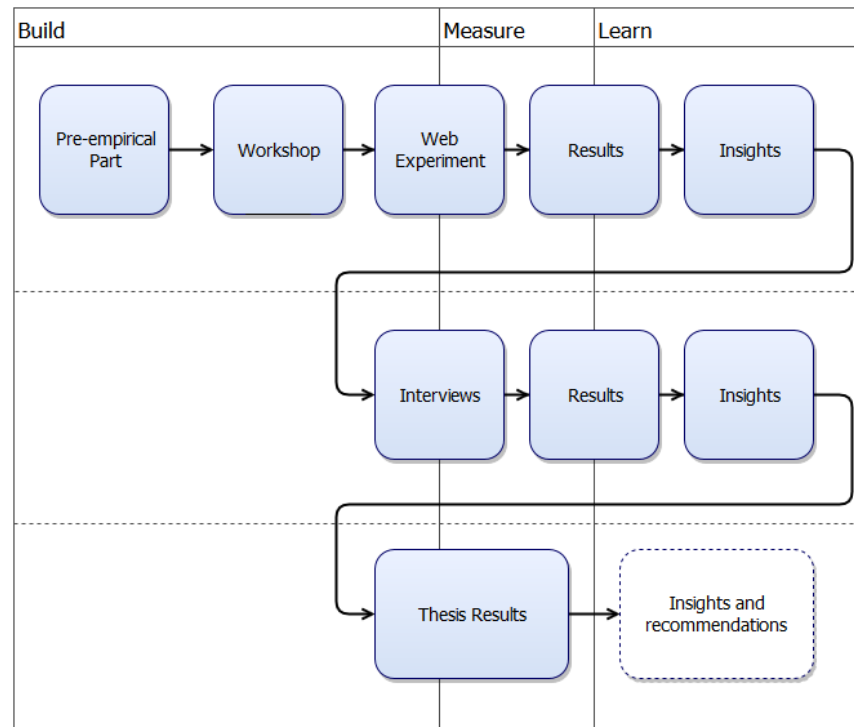


Figure 21. *The progress of different sections*

The figure emphasizes the empirical part and therefore different preparations, such as customer segmentation, personas, or Lean Canvases are not separated here in more detailed. These are however included in the workshop preparations. Also theoretic perspectives related the consumer services and logistics are present in the empirical part. They are utilized in the preparation ideas and throughout the empirical design as a background influencer. Workshop preparations are described in the following chapter 5.2. In this part the preparations and analysis related to the upcoming lean startup process was made. The initial customer segmentation was in addition to six different personas. In the workshop preparation part the initial service ideas were opened in three different Lean Canvases and they are presented on the Chapter 5.2.3. These preparations work as a base for the conversation and concept development in the workshop.

The empirical part includes different sections that follow the lean startup principles. On the Figure 22 below the progress of the development process and different stages is shown.

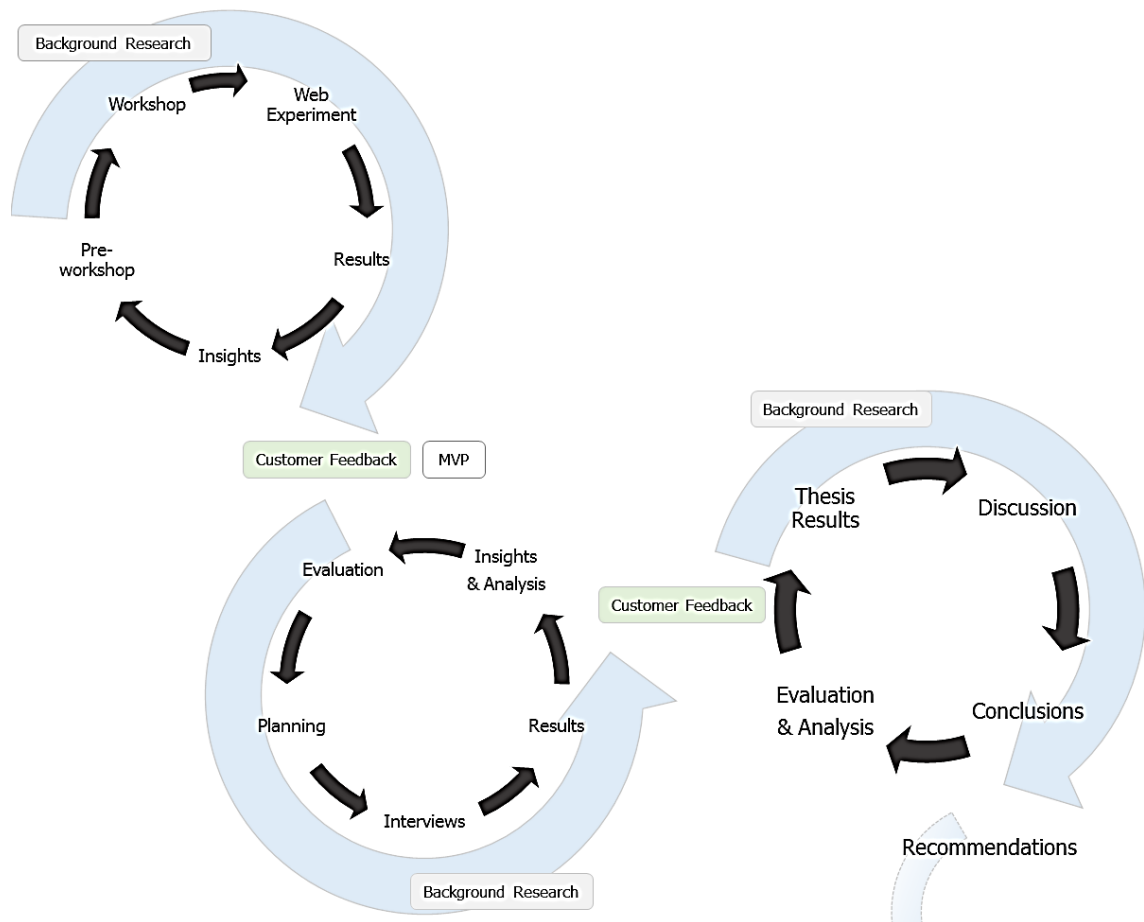


Figure 22. Lean startup based development process (Modified from Blank 2013, p. 72)

The process starts from the upper left corner of the Figure 22 and ends to the right lower corner. Basically two feedback loops of lean-startup were conducted related to the topic. The third loop in the figure illustrates the results part, and the recommendations that also include the recommendations for the following loop of the development process.

The workshop part of the empirical research is explained in the Chapter 5.3. Based on the workshop progress a web experiment was executed. The experiment with its results and insights is documented on the Chapter 5.4. Following on the insights there ten consumer interviews were made, and they are presented in the chapter 5.5 with the results and insights. Based on these steps the further thesis results, insights and recommendations are generated and represented in the later chapter 6 and 7.

5.2 Preparation for the Workshop

In the workshop preparations the theory was combined with ideas, and information received from Tori. Before the teamwork in the workshop, the selection of three initial Business Models were created with lean canvas by the researcher. The preparations follow the principles presented in the third chapter, so the decisions made here by the researcher are best-guesses that will be validated further in the process.

Figuring out the customer needs is an important part of this stage of the process. The idea here is to understand the important customer segment, and the critical problems worth solving. This creates a strong basis to start the Lean Canvas with the customer-problem section. In this part the literature and theory that is represented earlier is utilized in the initial concept development. This chapter describes the segmentation decisions, illustrates the personas that were created to support the development, and presents the three initial lean canvases.

5.2.1 Customer Segmentation

The initial customer segmentation was done based on information from Tori, category features and consumer needs. According to the market segmentation study there are three rather different groups what it comes to usage of the product segments.

In Tori there are different main customer segment categories that vary from each other on their behavior and needs. Out of these categories in this part the Female and Fashion segment was selected as the focused customer segment. The decision was based on the group characteristics, common products, and barriers. On this category the most common product categories are simplest and less varied from the logistics perspective. In this stage the user type is not strictly focused into a specific user group, such sellers, buyers, super-users, or non-users of Tori. However the non-users are left out of the main focus in the beginning of the development, since they have very strong barriers and are the hardest to reach. On the other hand the super users, who have the fewest barriers and are the most significant group based on volume significant user group. Most of likely the early adopters are also super users.

Inside the Female and Fashion segment there are still very different kind of users to buy and sell variable products. As stated previously, the selected customer segment should not be too wide or it becomes too hard to manage. The segment should be understood deep enough to make valid justifications on the customer needs and problems. The segment is further divided into smaller divisions to support the development. In marketplace environment the different user roles make the segmentation more complex. One type of customer can act either as a seller, buyer or both in the service. Also by the hybrid consumer definition, the needs of one user can vary drastically. The different user roles, and their reflections to each others were taken into consideration when customer segmentation is made.

5.2.2 Personas

From the Female and Fashion segment six different personas were created following the ideology presented in the Chapter 3.2.1. The idea of the personas is to get a more realistic feel about the customer who the service is being developed. The personas in this part of the process are:

- Busy Mom
- The Decorator
- Dog Owner
- Career Woman
- Fashionista
- Young Hipster

The personas are different enough from each other and can have different needs related to service. These personas can change throughout the process, but in this part they were determined by a researcher in order to get a more focused setting for the lean startup workshop

These personas are considered to be detailed and relevant for the topic in this stage. They are also considered to cover the Female and Fashion customer segment in deep enough coverage. There were created out of all personas to support the development process. The canvases include four different sections, which are facts, pain, behavior and goals. The model of this persona canvas was adapted from LeansStartup Machine (2015). In the Figure 23 below is the Busy Mom persona card.


<p>FACTS <i>Factual information about the target customer</i></p>  <p>Mari Age: 38 years Married for 9 years, 4 kids (baby, 2, 7 and 10 y.)</p> <p>Nurse, currently on maternity leave. Enjoys outdoor activities with her children.</p>	<p>PAIN <i>The problem you believe the target customers have, what the solutions solves for</i></p> <p>Mari buys a lot of clothes&accessories for children, but buying products from multiple sellers requires a lot of effort. When she sells them she also has to organize with a lot of people.</p> <p>Kids grow fast and she is selling the items often. She is very busy with the children and finds the process all in all too effortless. She still does not want to give them away for free. Sometimes getting all the items sold can be challenging.</p>
<p>BEHAVIOR <i>The behaviour they execute now because they don't have your solution</i></p> <p>She does not want to buy everything new so she just organizes with lot of different buyers and sellers. She also has a lot of things to sell and sells them online and flea markets.</p> <p>Sometimes she takes the items to the flea market. In Tori she sells multiple items as a package. This way she gets the things sold faster, although does not get as much money.</p>	<p>GOALS <i>What goals are they trying to accomplish through the behaviour, that you will do better</i></p> <p>Try to get rid of the excess items without losing too much money. She has a frequent need to buy new things for her children and also sell their old items. She does not want to put too much effort, it does not feel fair to her.</p>

Figure 23. Busy Mom persona

Busy Mom was presented as 38 year-old married woman with four children. She is a nurse and lives busy family life. On the Figure 24 is The Decorator persona.

FACTS*Factual information about the target customer*

Irmeli
 Age: 53
 Married, 2 children
 (19 & 23 years)
 Graphic Designer
 Enjoys long walks and nature,
 reading a book in the candle
 light. Likes to buy household
 items and decoration and
 browses these categories
 often

PAIN*The problem you believe the target customers have, what the solutions solves for*

She sees a lot of decoration items and furniture she could buy, but she can only choose from those that she can reasonably access.

She likes to buy and sell stuff online and it has become to her like a hobby. However she can't always find the items she is looking for, or they are not easy to get. Sometimes she struggles to find a proper buyer.

BEHAVIOR*The behaviour they execute now because they don't have your solution*

She goes to pick-up the products even if they would be a bit further. Also sometimes she has delivered items to people. Sometimes she lowers the prices of her items so she would find buyer faster.

GOALS*What goals are they trying to accomplish through the behaviour, that you will do better*

She want to have easier access to even more items. For some items she would pay more to get them delivered to her house.

Figure 24. The Decorator persona

The decorator is a 53-yearold graphic designer with two adult children. She enjoys decorating and nature. Figure 25 presents the Dog Owner persona.

FACTS*Factual information about the target customer*

Anne
 Age: 40 years
 Salesperson
 Married, mom of a two
 girls (13 & 16 years), dog

 Spends a lot of time home
 Likes to watch TV and read
 online medias. Buys and sells
 products from multiple
 categories, clothes,
 accessories, household items,
 furniture, etc.

PAIN*The problem you believe the target customers have, what the solutions solves for*

Anne is an active user in Tori. However she wishes that it would be easier to get money out of the sold items. She is frustrated that buyers always want to bargain and get the items almost for free. However as a buyer she is also very strict about the price.

BEHAVIOR*The behaviour they execute now because they don't have your solution*

She sells most of her items in Tori but sometimes in a cheaper price than she had originally wished.

GOALS*What goals are they trying to accomplish through the behaviour, that you will do better*

She wishes she would find potential buyers easier and make more money with the sold items. She also hopes that she could make better bargains herself.

Figure 25. The Dog Owner persona

The Dog Owner is 40-year-old Anne, who enjoys spending time home watching television and reading online media. Next Figure 26 is a description of the Career Woman persona.

FACTS*Factual information about the target customer*

Taina
Age: 32 years
Unmarried, No Children

Works in Finance Management for a large company, lives in city-area. In her free-time enjoys nice restaurants, sports, reading and traveling

PAIN*The problem you believe the target customers have, what the solutions solves for*

Taina is very busy working and she does not have the time to arrange or sell her excess items. She has a lot of stuff accumulating around the house.

She would like to get some money out of them because some of her items are more valuable, but at the moment it is more important to her for just to get rid of the excess items easily.

BEHAVIOR*The behaviour they execute now because they don't have your solution*

Do not buy or sell as much items

Every once in a while gives a lot of items to charity or friends

Used to sell in the flea markets but now does not find the time

GOALS*What goals are they trying to accomplish through the behaviour, that you will do better*

Because of the lack of time the primary goal is to get rid of excess items. Giving them away for free sometimes feels like a waste, especially if the stuff purchased was more expensive.

Taina would like to get rid of her excess items with a minimum effort, but still manage to get at least some money back

Figure 26. Career Woman persona

Career woman is a 32-year-old unmarried woman working in finance sector. She is extremely busy with her career and enjoys nice restaurants, reading and traveling. The Figure 27 is a description of the Fashionista persona.

FACTS*Factual information about the target customer*

Charlotta
Age:22-years
Unmarried, no children

A second year marketing student. Has a fashion blog, interested in combining used and new items in her style. Mostly sells clothes, accessories and decoration

PAIN*The problem you believe the target customers have, what the solutions solves for*

Charlotta has a lot of clothes she wants to sell. However she finds it too difficult to sell/send/organize things with tens of different buyers. This is too time consuming for her.

She is also interested in buying used clothes, accessories and decoration if she finds an interesting item. She would buy more products and more often, if every time she would not have to meet the seller or go get the product

BEHAVIOR*The behaviour they execute now because they don't have your solution*

Usually she takes the clothes to flea market or sells them in her blog. She still finds this time and effort demanding so often she also just recycles the items.

Sometimes she has sold things online but thought it was too much of a hassle.

GOALS*What goals are they trying to accomplish through the behaviour, that you will do better*

Selling multiple items should be easier and less of an effort. Also buying could be more simple.

Wants to minimize organizing and communicating with seller/buyer on how to deliver the product

Figure 27. Fashionista persona

Fashionista is a 22-year-old marketing student Charlotta. She has a fashion blog and she is interested on combining used and new products in her style. The last Figure 28 presents

the Young Hipster persona. Young hipster is 20-year-old Aurora, who likes indie music. She is an art student and want to avoid buying too many things.


<p>FACTS <i>Factual information about the target customer</i></p>  <p>Aurora Age: 20 years Unmarried, no children</p> <p>Likes to listen indie music and interested in manga. Art student.</p>	<p>PAIN <i>The problem you believe the target customers have, what the solutions solves for</i></p> <p>Aurora is living on a student budget and buys almost everything secondhand. Sometimes she can't buy furnitures for example because she does not own a car.</p> <p>She also sells her items often because she does not want to own too much unnecessary items.</p>
<p>BEHAVIOR <i>The behaviour they execute now because they don't have your solution</i></p> <p>Once she was moving and tried to sell a table and a sofa. She had to wait for too long time to find a potential buyer, because the buyer had to pick-up the product. Eventually she had to take them to the recycle center.</p>	<p>GOALS <i>What goals are they trying to accomplish through the behaviour, that you will do better</i></p> <p>She thinks this selling should be easier for her. Especially for bigger items she is ahving trouble to manage properly</p>

Figure 28. Young Hipster persona

These personas were created in order to understand the problem and the setting better. They are referred to later in the process, and they might also be altered when the development process gets further.

5.2.3 Lean Canvases

Problem-centered approach means that there is an identified problem that entrepreneurs have faced themselves or have witnessed close-up. Presumption is that the customer is understood relatively well. However, although there is a problem it does not necessarily lead to the conclusion that there is an addressable market. Also there is a risk of being led towards the solution that the market majority does not want. (Cooper & Vlaskovits 2013, p.34)

Three different initial lean canvases are presented in this chapter and they were used as a base for the discussion in the workshop. They were filled by the researcher based on the trends, innovations, explored ideas and customer needs presented in this thesis earlier. Also the theoretical factors presented on the Chapter 2 are utilized in this part especially when considering the possible solution. Lean canvases are filled according to the principles presented in the Chapter 4.5. In this stage they represent the best guesses on the service concept related factors and some parts are more detailed and relevant for the topic than the others. The lean canvases serve as a standing point for the empirical part of the project and they are not meant to use as ready business model or concept. The idea is

that the canvases are updated when the process continues further. Lean canvases here are filled utilizing LeanStack application tool (see LeanStack Inc 2015).

In all the Lean Canvases the customer segment is determined at this stage as Female and Fashion users. The early adopters are different depending on the canvas. The most relevant parts of the Lean Canvases at the beginning of the development are the problem, customer segments, solution and unique value proposition. Other areas are harder to determine in the beginning of the process but are also to some extent less relevant at that stage because the development focuses more on the customer needs and problems.

In marketplace service filling out Lean Canvas can be a bit ambiguous. The customers have different ways of using the service, but in order to understand the problem properly the aspects should be understood detailed enough. Maurya suggests in the LeanStack application that usually the best way is to create separate Lean Canvases for different actors in the service (LeanStack Inc 2015). However in this type of environment the problems, or other seller and buyer related actions, can be closely related to each other. Some solutions can also solve more than one party related problem. One user can also be both seller and buyer. Therefore the sellers and buyers are divided by some extent but in this stage viewed on the same canvases.

In the canvases different type of users are taken into account. The users have been divided by some extent into sellers and buyers in Female and Fashion segment. Some aspects are marked clearly as considering only sellers or buyers. The first initial Lean Canvas is illustrated on the Figure 29.

PROBLEM Does not want to communicate with the other party more than necessary Buying/Selling multiple products is too much effort or not fast enough	SOLUTION Distribution center that also works as a flea market (physical market place).	UNIQUE VALUE PROPOSITION Seller: Why wait? get the item picked from your doorstep tomorrow Buyer: Find everything you need and get them delivered tomorrow	UNFAIR ADVANTAGE Existing customers combined with the service model Online and physical marketplace	CUSTOMER SEGMENTS Female & Fashion (Seller, buyer, Super user)
	KEY METRICS Amount of users Amount of distribution center related selling actions Amount of purchases		CHANNELS Existing customers and channels, current web site	
EXISTING ALTERNATIVES Distribution center model (e.g. vähäkäytetty). Different type of market place logistics		HIGH-LEVEL CONCEPT Flea Market with an online platform and distribution service		EARLY ADOPTERS Busy Mom Fashionista (Super User)
COST STRUCTURE Development costs Distribution center operating costs and fixed costs Salaries			REVENUE STREAMS (Strengthening the existing revenue streams) Logistics cost depending on the product, pricing should be about Min. 5 eur, Standard max 10 eur, Big 20-100eur Possible cost for the consumers on the physical selling of goods	

Figure 29. First initial lean canvas

The most critical problems illustrated in the first Lean Canvas (Figure 29) are considered relevant for both the seller and buyer. The issue selected for this canvas is multiple product and therefore multiple party related problem. The customer problems are written here “Does not want to communicate with the other party more than necessary” and “Buying or selling multiple products is too much effort or too slow”. The first presented problem is considered relevant for any user type and the latter one especially for the super user, who is both buyer and seller. Assumption is that the super user is selling and buying multiple products more than only sellers or only buyers which is why this issue was thought to consider the super user above others. The early adopters here are determined as Busy Mom and Fashionista personas, who are also super users of the service.

The idea for the solution here is a distribution service concept which would also work as a flea market. The point is that the best features of both models could be utilized, as distribution center could enable more efficient deliveries. Instead of just warehousing the items the space could be used as a physical market place as well. The second initial Lean Canvas is presented on the Figure 30.

PROBLEM Buyer: needs a lot of different products and services from different sellers or companies but has to spend a lot of time and effort to get them Seller: Does not get things sold fast enough	SOLUTION Combines services and products. Offers different types of tailored package-solutions based on consumer needs. Value networks based site that could bring value to different parties involved.	UNIQUE VALUE PROPOSITION Buyer: Find the products you wish and combine them with proper services Seller: Let someone else do the hard work for you!	UNFAIR ADVANTAGE Type of service not widely in use Combining services and site with tori products	CUSTOMER SEGMENTS Female & Fashion (Seller, buyer, Super user)
EXISTING ALTERNATIVES Different sites that combine different providers. Usually limit under specific service or category	KEY METRICS Amount of users Amount of transactions Activity around other companies involved	HIGH-LEVEL CONCEPT Combining ebay and services	CHANNELS Existing customers and channels, web page	EARLY ADOPTERS Busy Mom The Decorator (Super User)
COST STRUCTURE Development costs Operating and update costs			REVENUE STREAMS Services revenue Revenues related to companies involved Charge per package or per service	

Figure 30. Second initial lean canvas

The problems in the second canvas are addressed for the buyer as “Needs a lot of different products and services from different sellers or companies but has to spend a lot of time and effort to get them” and for buyer “does not get things sold fast enough”.

The problems were slightly hard determine and the depth of them can vary. For example the described seller’s problem of not getting things sold fast enough can for example actually be a problem of not knowing how to set the right price, not reaching enough buyers, selling items that no one wants to buy or something else. In this part they were determined quite general level. The customer to who these problems most likely would be the most painful, are here determined as Busy Mom and The Decorator.

As a part of the solution in this canvas the idea is to offer tailored service-product package solutions for the consumer. This means that services could be offered in such a way that the consumer could purchase them easily through as a package just from one place. The third Lean Canvas is on the Figure 31.

PROBLEM Diversified user needs depending on the dimensions of buyer, seller, product and purpose.	SOLUTION Site that collects all the providers under one site. Linked with Tori. Combines couriers, transportation, post, crowdsourcing etc etc.	UNIQUE VALUE PROPOSITION Buyer: Select the delivery method that fits your needs Seller: Find your buyer faster, from anywhere	UNFAIR ADVANTAGE Right Partnerships Combining the service with the existing site and customers	CUSTOMER SEGMENTS Female& Fashion (Seller, buyer, Super user)
EXISTING ALTERNATIVES Existing sites (parcel2go), online shop delivery options	KEY METRICS Amount of transactions App users	HIGH-LEVEL CONCEPT Parcel2go for sepcifically market place customers	CHANNELS Current customers and website	EARLY ADOPTERS Young Hipster Fashionista (Super User)
COST STRUCTURE Development and update HR related costs		REVENUE STREAMS Money from companies that are in the site (advertisement) Possibly some share of delivery costs		

Figure 31. Third initial lean canvas

The third Lean Canvas looks at the problem in a more universal level as it states “Diversified user needs depending on the dimensions of buyer, seller, product, and purpose.” So this problem is written in quite in slightly vague way although it exists in this type of market place service and especially if considering hybrid consuming. This is not as direct forward focused to one specific user group.

The solution idea is a kind of site that could collect all the providers under one site and be linked with Tori. Basically the idea was that the delivery options could be collected under one place in the kind of way that all the parties involved could benefit from it. The customer could have all the delivery options under the same site or app and the providers could be more visible to the customer. An example of service like this is the Parcel2Go (2016) service introduced already earlier in the trends section of this thesis. It is however still considered here that Young Hipster and Fashionista could be the early adopters of this type of service.

These Lean Canvases were at this part made individually by the researcher and they were used as a basis for the development and ideas in the workshop. The idea of any of them is not to be a ready business model, but to serve more as a notes at this point.

5.3 Workshop

In this part the progress of the workshop is described more detailed. In the beginning of the workshop different lean canvases and the homework made based on previous chapter were used as a foundation for conversation. Although the Lean Canvases represent the initial business models, in the workshop the ideas are examined in more detailed level. The workshop was held in Tori's office in Helsinki. In the beginning of the first workshop the team included three members. In addition to the researcher the team members were the head of the product Esa Övermark, and user experience lead Juha-Antti Huusko. On latter part of the workshop the team was topped up by a user experience design member Thomas Djuspö.

A tool used in the lean startup workshop is the experiment loop canvas illustrated in the Figure 32. The loop is applied from Moves the Needle Leap accelerator program (Moves The Needle LLC 2014; Cooper 2014b)

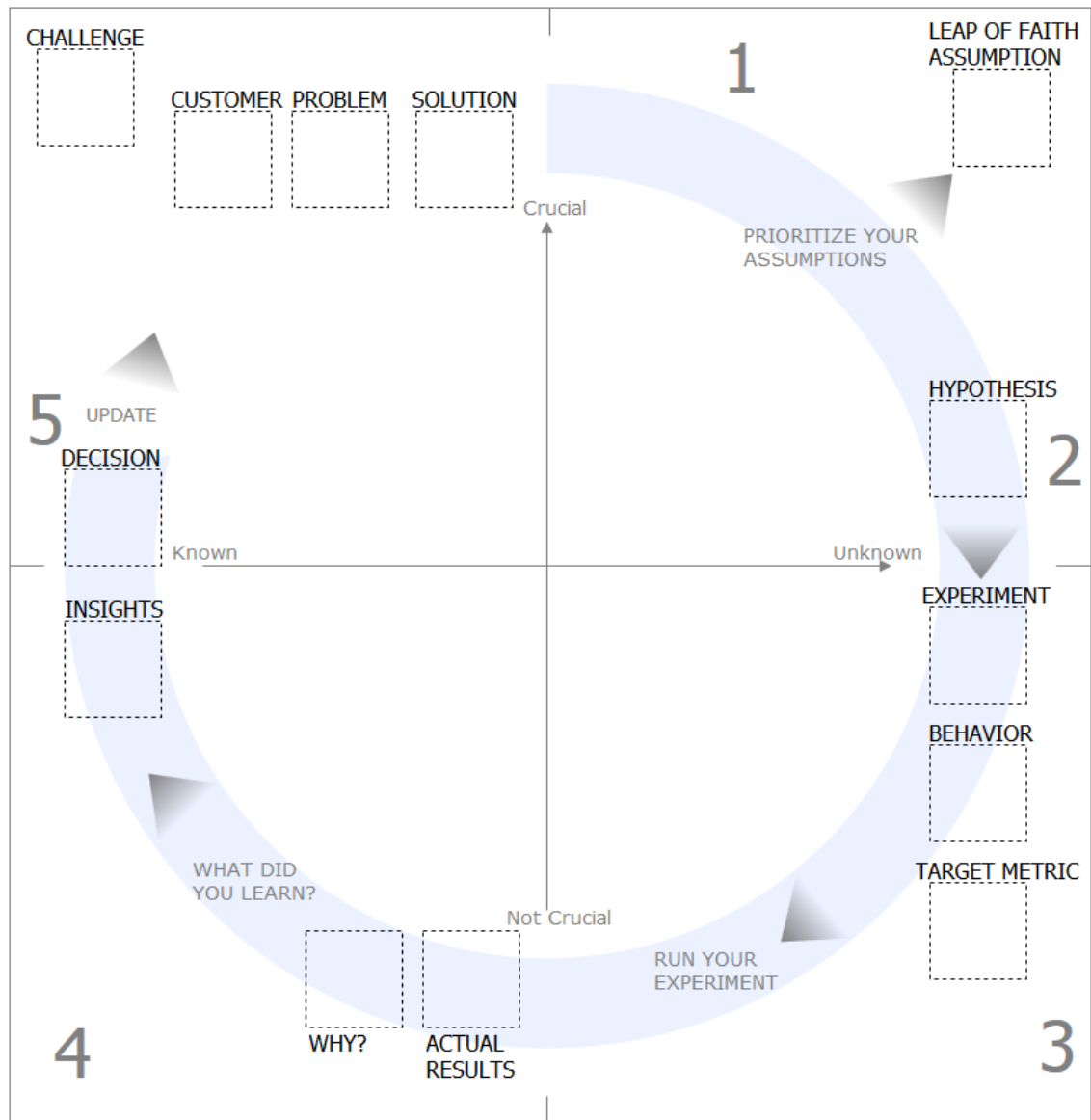


Figure 32. Experiment loop (Moves The Needle LLC 2014)

The loop helps to follow the lean startup process and the findings were collected to it. It was printed in big size canvas and hanged on the wall. In the canvas the square shaped areas were filled with post-it-notes following the progress of the workshop.

For different sections the team members illustrated their ideas, discussed about them, and agreed on the ones that were hanged on the loop with post-it-notes. In the workshop the loop canvas was started from the upper left corner which was then followed the way at the direction to the loop arrows and numbers. This loop follows the theoretical framework lean startup principles presented in the third chapter of this study.

The process started with the determination of the challenge, customer, problem and the solution. This was followed by defining the leap-of-faith-assumption which was created by prioritizing different assumptions related to the setting. The following part was the creation of the hypothesis that bases on the experiment, behavior and target metric. These

three components together determined the hypothesis that is often written in the previously presented form of Falsifiable Hypothesis = [Specific Repeatable Action] will [Expected Measurable Outcome] (see Chapter 3.2.3.).

Running the experiment answers to the ‘Actual results’ on the experiment loop. This follows an evaluation of the results. From lean startup perspective one of the most critical is the learning part. In the experiment loop this is illustrated on the ‘Insights’ box, which also determines the decision of whether to pivot or persevere is made. The different parts of the lean startup process, workshop progress, and the usage of the experiment loop tool are described more detailed in the following chapters.

5.3.1 Focus and Approach

According to Cooper and Vlaskovits (2013, p.33) the usual key driving elements they list as Segment, Problem, Product, Technology or Sales Channel. In this case the driving force is problem-centric. This is illustrated in the Figure 33 below.

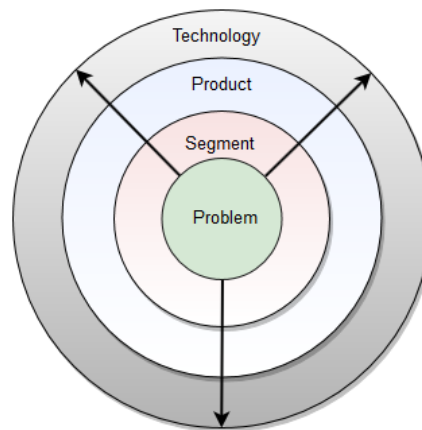


Figure 33. Problem-centric approach (Cooper and Vlaskovits 2013, p.33)

In problem-centric approach the idea is to start with the problem and then define the segment that has the problem most acutely. Then the idea is to define the solution the segment is willing to use to solve the problem. If the goal is to solve a problem, it is important to constantly question the technology and solution. (Cooper & Vlaskovits 2013, pp.33–34) Maurya’s (2012a) lean canvas and the approach here follows this kind of perspective.

In the first workshop the team discussed different approaches on the topic. A lot of important factors and aspects related to the development area were recognized. The idea in this stage was to choose the kind of approach that the team considers important and critical but still uncertain. During this stage a lot of problems and challenges were recognized, as well as opportunities for the direction of the development.

presented in the following chapters in this study. Different steps and their appearance are highlighted on the Figure 35.

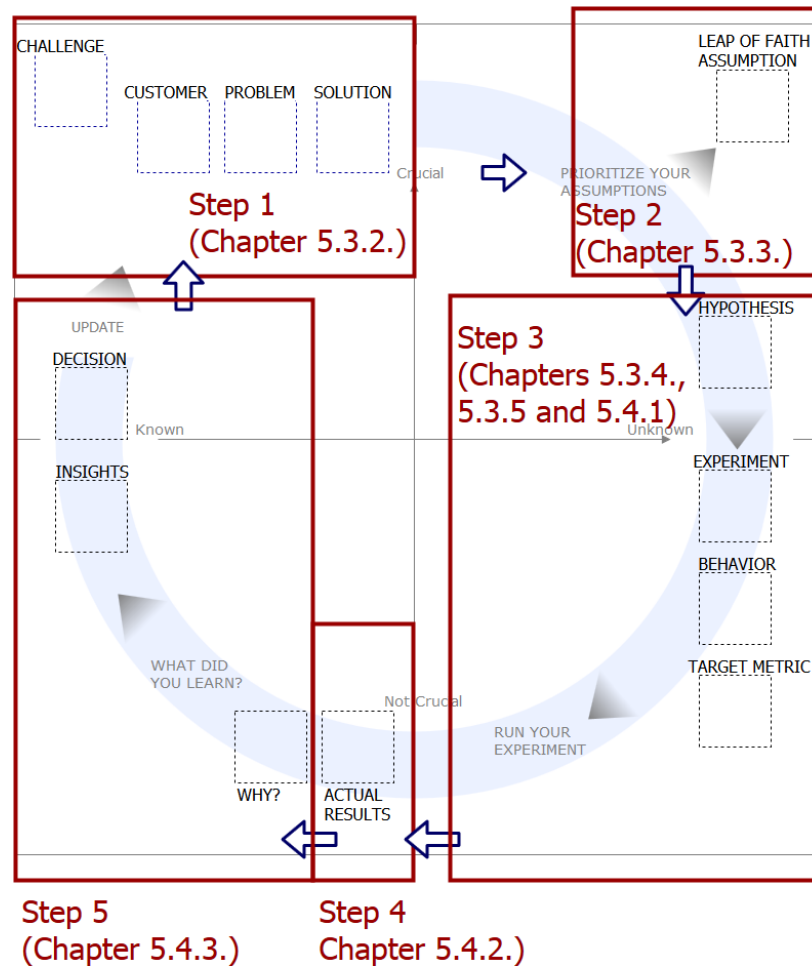


Figure 35. Experiment loop steps and chapters they are shown

The customer and problem sections were filled in line with the Lean Canvas (Figure 34). They were modified a bit from the original canvas and the team analyzed which sections would be the most important here. The solution was created based on different ideas and it emphasizes the features that the team thought that are meaningful for the customer. There were a lot of different challenges, customers, and problems but the team had to choose a focus for the workshop. The chosen Challenge, customer, problem and solution are represented in Figure 36.

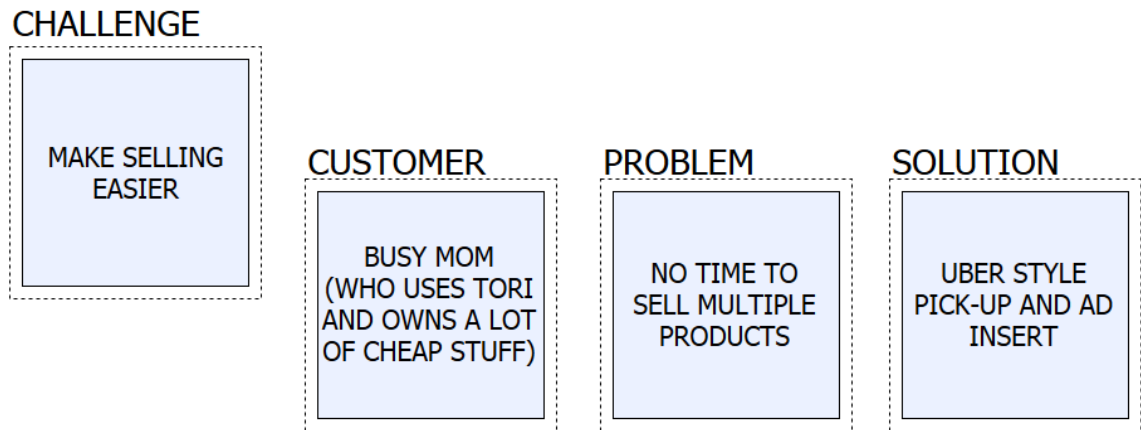


Figure 36. Experiment loop's challenge, customer, problem, and solution

Based on customer, problem and solution the team defined the challenge as “Make selling easier”. This was seen as a high-level challenge for the sellers in Tori and also an important challenge that the first round of iterations would try to answer.

For the first experiment the customer was determined as Busy Mom (see personas chapter 5.2.2.). Busy Mom was considered likely to be an early adopter for the concept, and it can be considered relatively significant and important user group in Tori. The team also thought that the problem is probably most critical for the Busy Mom segment. For a better allocation Busy Mom was also described as a person that owns a lot of cheap stuff and is already a user of Tori. The group thought that this kind of service would most likely be used by busy people who do not have the time, or do not want to put up the effort to sell their useless things.

As a problem the group agreed to start with a multiple product related problem illustrated on Figure 34. The problem also needed to be focused on either observing seller or buyer behavior since their needs differ from each other. In this part the team decided to go for the seller problem, because if the sellers would not adapt the service, there would not be any buyers either. This particular problem was also considered to have more impact on the seller than the buyer. The team members recognized that there are a lot of potential sellers that are not willing to put a lot of effort on organizing the delivery, pricing, ads or meetings with the buyers. The group also agreed that the most likely group to have this problem is the Busy Mom segment. Based on these insights the team described the problem as “No time to sell multiple products”.

From logistics perspective different products have different requirements as stated previously. The categories were previously divided from logistics perspective into four different ones. (See chapter 4.3.2). The setting for product category 3, for example furniture, can be in many ways very different than for example product category 1 or 2. Also changing customer demands and problems make the situation even more complex. At this point the product category 2 was considered as the most eligible one and the products were focused further on clothes and shoes. The specific problem was considered

to relate mostly to this product category and the team thought that the consumer that sell clothes would specifically have this issue.

Although the lean startup focus on this stage was on the customer and problem the team was considering different features and the user behavior over the possible solution of the service. Figure 37 presents some ideas that the team had at this point on the solution and on how the customer could use the service.

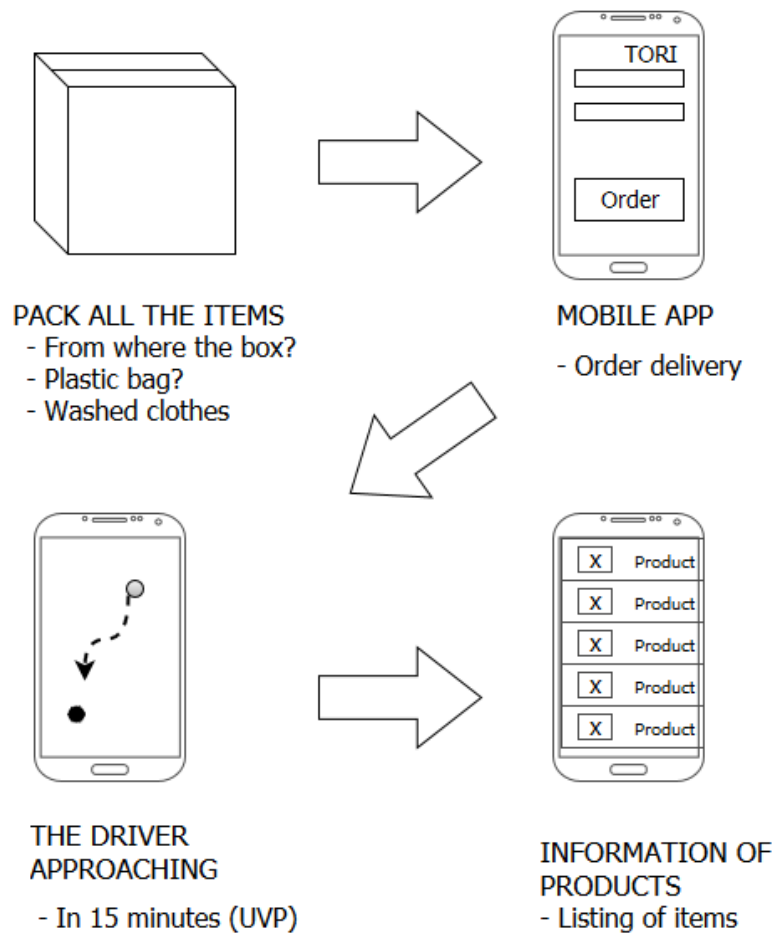


Figure 37. Illustration of the workshop notes for the solution

Figure 37 is based on the notes made on the workshop. In the brainstormed solution the seller could pack all of the desired items into one package. The delivery could be ordered with few clicks on the mobile app. After this the driver would arrive on a short notice. The customer could follow the driver approaching on the mobile app and just wait home for the delivery pick-up. Later the listing of the products would appear on the site of Tori. In this solution the idea was that the service would be made extremely user-friendly and easy to use. The customer experience would be extremely convenient and effortless. At this point the solution is very customer based and the technical features would be considered later if this is really would be confirmed as something that the customers want.

Solution in this part was determined as “Uber-style pick-up and ad insert”. The products would be picked up from the seller door on a short notice and the seller would know exactly when. The seller would not have to add any selling ads or prices for the products since this would be done by Tori. In ideal case the seller could just wait for the pick-up for all of the products as Tori would take care of the rest. In this part of the process the team had a lot of ideas about the solution and they were discussed. However, following the principles of lean startup, the solution should not be too much in the focus in this stage. The solution features would be validated, modified, or dismissed as the process goes further.

5.3.3 Leap-of-faith-assumption

The leap-of-faith-assumption is the most critical and the most unknown assumption that the team made regarding to the service. It was recognized by prioritizing the assumptions. The position of the leap-of-faith-assumption is on the right upper corner of the loop (Figure 32).

In this section the team members created different assumptions related to the challenge and wrote them in post-it notes. The idea here was to gather different assumptions related to the customer segment and the determined problem. The assumptions were produced by individually brainstorming for about five minutes. They were then presented to the other members and placed in the middle section of the loop in a position that the team mutually agreed.

The prioritizing was made by placing the assumption notes on the middle section of the loop. In the middle of the loop there are vertical and horizontal axes. The vertical axis determines how crucial the assumption is considered. The horizontal axis determines how known or unknown the team thinks the assumption is. The combination of these factors brings up the most crucial and unknown assumption related to the challenge (Figure 38).

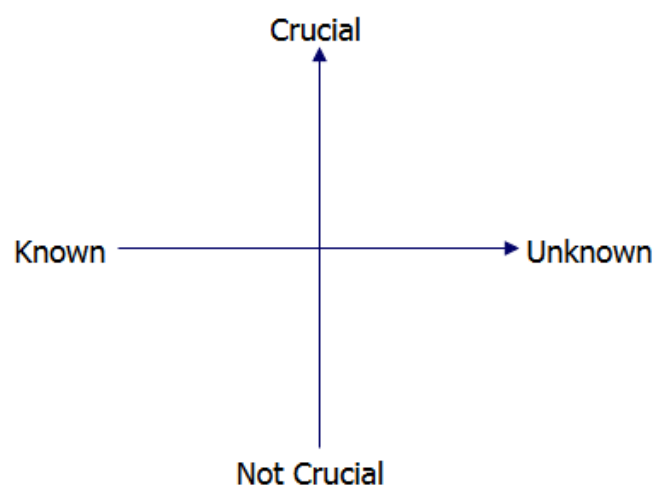


Figure 38. Loop axes

The more to the right the assumption is located the more unknown the team thinks it is. Also the upper the more crucial the team considers the assumption. The post-it note that ends up to be most crucial and unknown assumption is selected as the Leap-of-faith-assumption. This post-it note will be the one that is located on the most upper-right corner of the Experiment loop canvas axis. Different assumptions that the team members created in the individual brainstorming section are presented on the Table 5 below.

Table 5. Assumptions in lean startup workshop

Assumption	Number
Cares about charity	1
Owens a lot of cheap stuff	2
Has multiple items to sell	3
Getting rid of stuff is important	4
Wants to know where the courier is when coming	5
Does not want to ship things using a box	6
Does not want to create ads	7
Does not want to categorize the stuff	8
Wants pick-up from home	9
Trusts the delivery guy	10
Does not want to take the items to multiple locations	11
Cares about environmental aspects	12
Prefers apps over desktop usage	13
Price is not important	14
Wants someone to pick-up the items from the front door	15
Does not mind if Tori sets the price	16
Wants to let tori to handle selling	17
Wants to sell 6 times / year	18
Getting rid of unnecessary things is more important than profit	19
Does not want to organize meetings with the buyers	20
Wants to sell them fast	21
Wants to get rid of useless items on short notice	22

The assumptions were posted on the canvas and their position was decided together with the team. The positions of these assumptions is shown on the loop in the Figure 39. The numbers represent the assumptions that are determined in the previous Table 5. Location on the loop axis can be identified based on this number. Five of the assumptions located to the most upper-right corner of the loop are also highlighted on the Table 5.

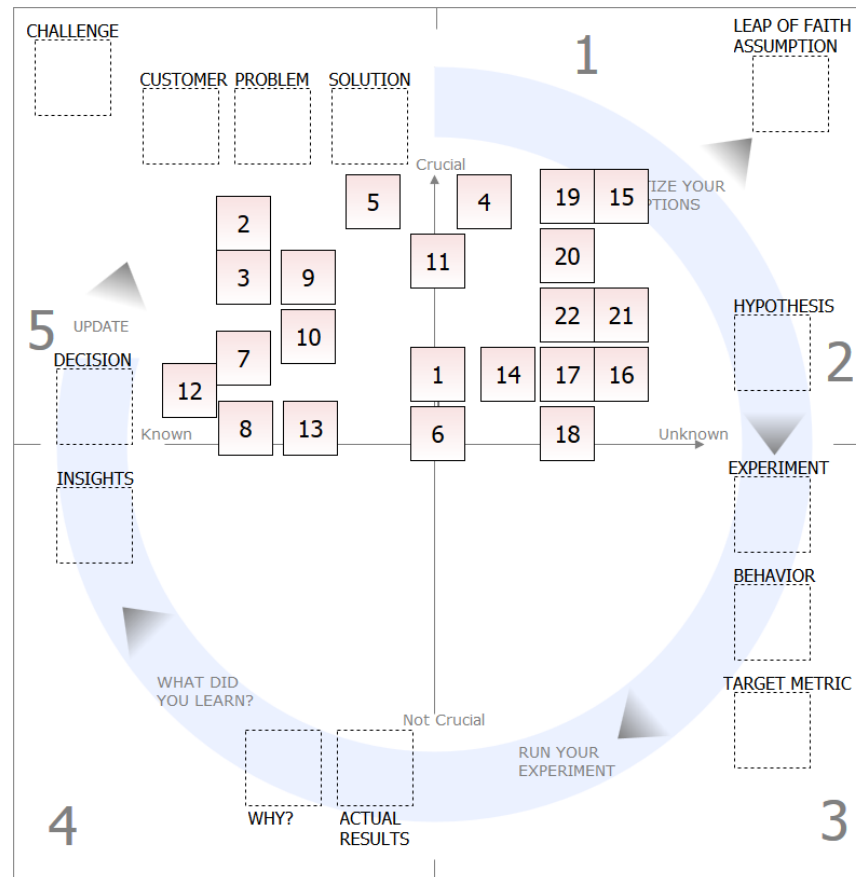


Figure 39. The positions of the assumptions

The positions here are best guesses that were discussed and analyzed with the team. The assumptions that the team considered the most unknown and crucial were related to the pick-up and getting rid of unnecessary things. Based on the team agreement these factors were wrote into new form that combined some of the most crucial and important elements. The chosen leap-of-faith-assumption is illustrated on the Figure 40 below.

LEAP OF FAITH ASSUMPTION

THE USER WANTS TORI TO PICK UP MULTIPLE ITEMS AT ONCE

Figure 40. The leap-of-faith-assumption

The Leap-of-faith-assumption was determined as “User wants Tori to pick-up multiple items at once”. This was the setting that created the base for the experiment.

5.3.4 Hypothesis and Experiment Elements

The experiment design is a critical part of the process. It is important that the experiment is as realistic as possible so that the outcome can be considered valid. The experiment also has to be measured in a proper way. Hypothesis is a measurable description on the leap-of-faith-assumption presented in the previous chapter. The hypothesis has to be in line with the experiment, behavior and target metric. The team considered first that how to execute the experiment, what kind of behavior is wanted out of it, and how to measure the experiment success. The hypothesis was written based on these factors and it is shown in the Figure 41.

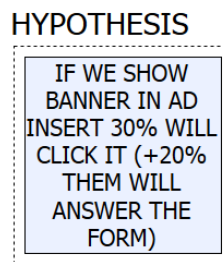


Figure 41. *First hypothesis*

Defining the experiment type was an important part of this section of the process. The team was considering between two options; interviewing the target customers or creating an online banner to the Tori site. Eventually the team decided at first to go with the online banner. The information received could also later be topped up with the target customer interviews. The idea of the experiment is that it imitates real situation as closely as possible. In lean startup a survey type of approach is avoided. The customer has to have an impression that the situation is real and that he or she is actually subscribing to something. The banner on the site was testing customer interest and need towards the service. The idea of this experiment was to follow how many users would click the banner. After clicking the banner, the customer could leave the contact information to hear more about the service. Then the customers that clicked or saw the banner would be contacted and asked more related to the possible needs for the service. Experiment, behavior and target metric are in the Figure 42.

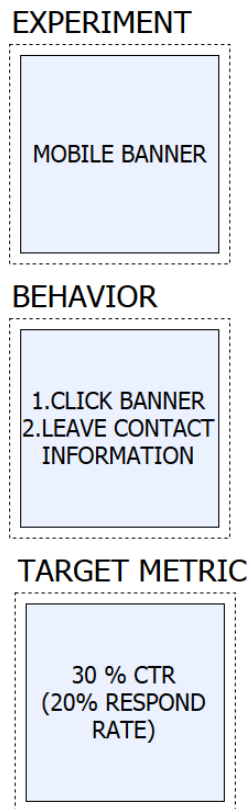


Figure 42. *Experiment, behavior, and target metric*

At this point the target click-through rate (CTR) was set to 30%. This means that out of the users that see the banner 30% should click it. There had to be an ambitious yet realistic target metric set to the experiment. According to Tori representors the target metric is very crucial but challenging part to set right at this point. Target metric has to aim high enough so that it really proves that the chosen direction is important to investigate. However, the target metric also has to be possible to reach its goals and be realistic in that sense. The target metric was set by analyzing the possible and wanted outcomes. Tori had recently had a similar type of experiment and online banner but related on a mobile application experiment. The key functionalities of this banner are presented in the Figure 43.

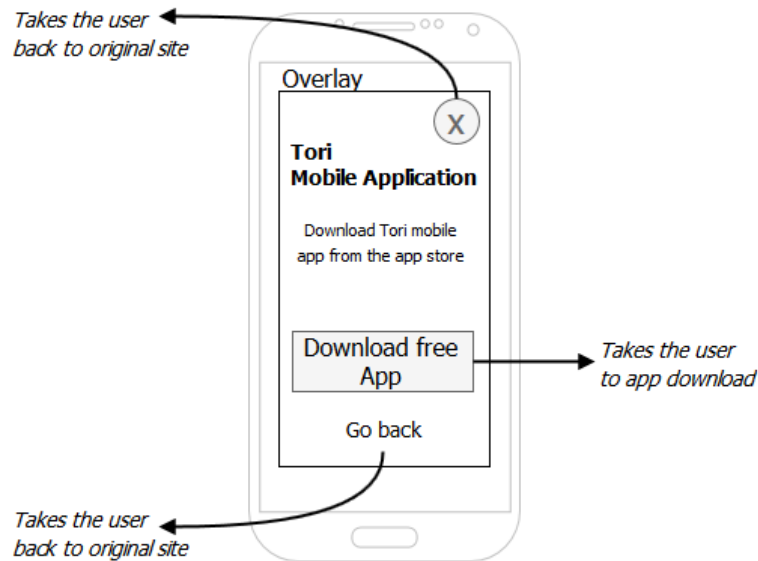


Figure 43. Overview on the comparison experiment

The experiment design is described more detailed in the following chapter. However the pick-up service experiment was decided to be executed in relatively similar way as the mobile app experiment shown in the Figure 43. This is why this the mobile app experiment and its results were used as a comparison for the target metric. The mobile app experiment had resulted in about 20% CTR in the visitors who continued to “Download free app”.

The target metric in question was created analyzing this topic and the features also in relation with the mobile app experiment. There were discussion on whether the target metric should be higher or lower than the one in the mobile app experiment. In the mobile app experiment the assumption was that some of the users have the application already so users would just ignore the banner. The pick-up service app was considered to be useful for anyone filling the selling ad. Based on this the target metric was decided to be set higher than in the mobile app experiment.

The 30 % CTR was considered to be a very ambitious metric to fulfill. However the team was optimistic about customers being interested in the type of service. The target for the CTR was therefore set to 30%. However the results will be analyzed later and not to just dismiss the idea if the target does not fulfill. Although the execution of the banner was similar to the mobile site app experience the idea and content are still very different. It is not that straightforward therefore to compare the key metrics but it can give some kind of idea on which scale is in question.

5.3.5 Experiment Design

There were different factors that had to be taken into consideration when discussing how to aim the banner to the target group but still get enough visitors. The experiment should

reach the target group as accurately as possible but still the amount of users it reaches has to be large enough to produce valid data. The team decided on executing a mobile banner experiment. The web experiment here serves as the MVP, presented previously in the third chapter. It is the version of the product that can verify or overturn the leap-of-faith-assumption with a minimum amount of effort.

Tori has three different user interfaces, which are desktop site, mobile site and mobile application. Desktop site is a web page meant to use with computer. The mobile site is a version of the web site optimized for the mobile site usage. The mobile application is a separate application that the user can download to smartphone. The team had to consider in which of these three options the experiment should be executed. The team wanted to target it to mobile users since the potential service would also be used with mobile device. The desktop version was for this reason left out at this point. For the mobile application the experiment was considered too complicated to execute. Therefore, the experiment was decided to be set to the mobile site. Mobile site would reach the customers since for many users it still is the primary way of using the site.

The experiment was decided to be focused to the sellers on Tori. The banner location had to be conducted in a way that it would reach the seller group. Therefore the banner was decided to put together with the selling ad insert. This was considered risky since the customer could get bothered or annoyed about the banner. This can also be seen on the outcome of the experiment. For example some users can just close the banner without even looking what is in it. The experiment should not harm the usage of the actual service too much. However in any case the experiment would slightly bother the user so this is something that just has to be taken into consideration when analyzing the results. The designed experiment main functionalities are shown on the Figure 44.

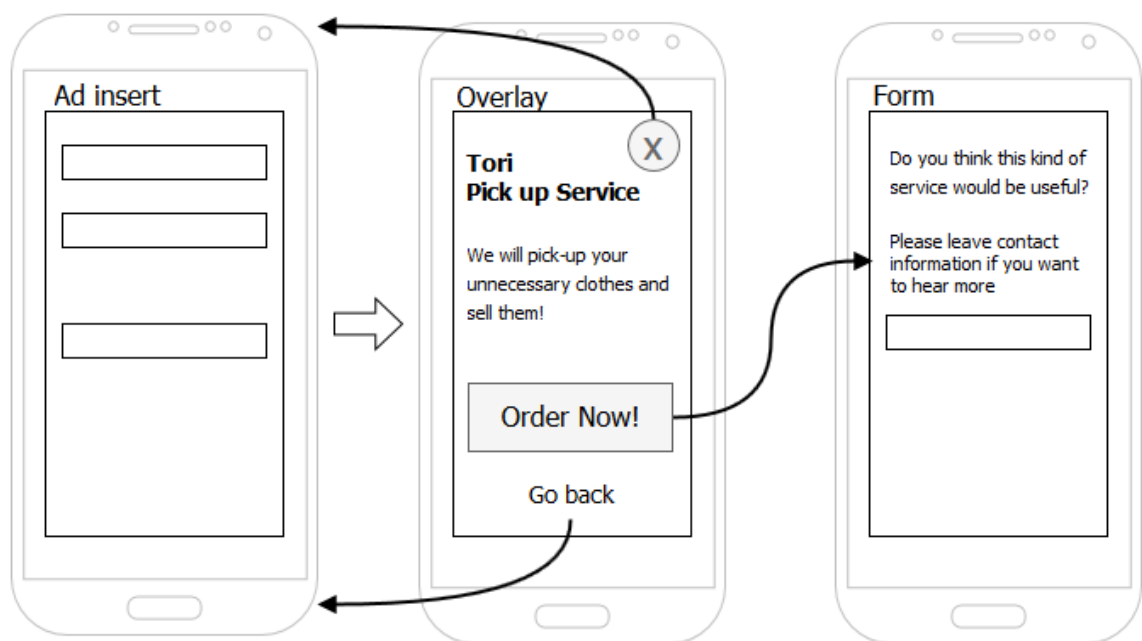


Figure 44. *Pick-up service experiment main functionalities*

In the Tori ad insert site the user will get an overlay box that includes the information about the service. In this part the user can either continue to the service or go back to the ad insert. The activity in the experiment is then measured. The Figure 44 was made based on notes and illustrations made in the workshops.

Reaching the target customers were challenging at this point. At first the target customer location was considered to outline to Finland's Uusimaa area. Also it had to be considered whether to target the experiment to users who are signed in, or to all the users. The benefit of targeting the experiment to the users who are signed in is that it would be possible to focus directly focus to a specific target group. However in order to get enough visitors to the banner the experiment was not outlined to a specific location or signed in visitors. The experiment would conduct results faster and give more qualified data with more users.

As the team thought that the service would most likely to be used with clothes and shoes it was chosen to be the target category for the experiment. Therefore the banner would appear when the customer chooses "Clothing and Shoes" category from the selling ad. In this part the experiment was therefore focused on a seller of tori, who sells clothes or shoes.

The banner had to be conducted in a way that it would not bother the users too much on what they came to do at the site. At the same time it should be as realistic as possible and the survey type of approach should be avoided. The experiment was written in a way of "Order now" although there is no actual service to order. The risk here can be that the visitor can get annoyed or feel like they are being misled. Also it was acknowledged that the pop-up banners can distract the users and this might have its impact on the results.

5.4 Mobile Web Site Experiment

The mobile web experiment was held on Tori mobile site for 7 days. This chapter explains the execution, results, and insights of the experiment.

5.4.1 Execution

The experiment was put on a mobile site of Tori and the user behavior was analyzed with Optimize A/B. The pick-up service experiment layout is illustrated on the Figure 45.

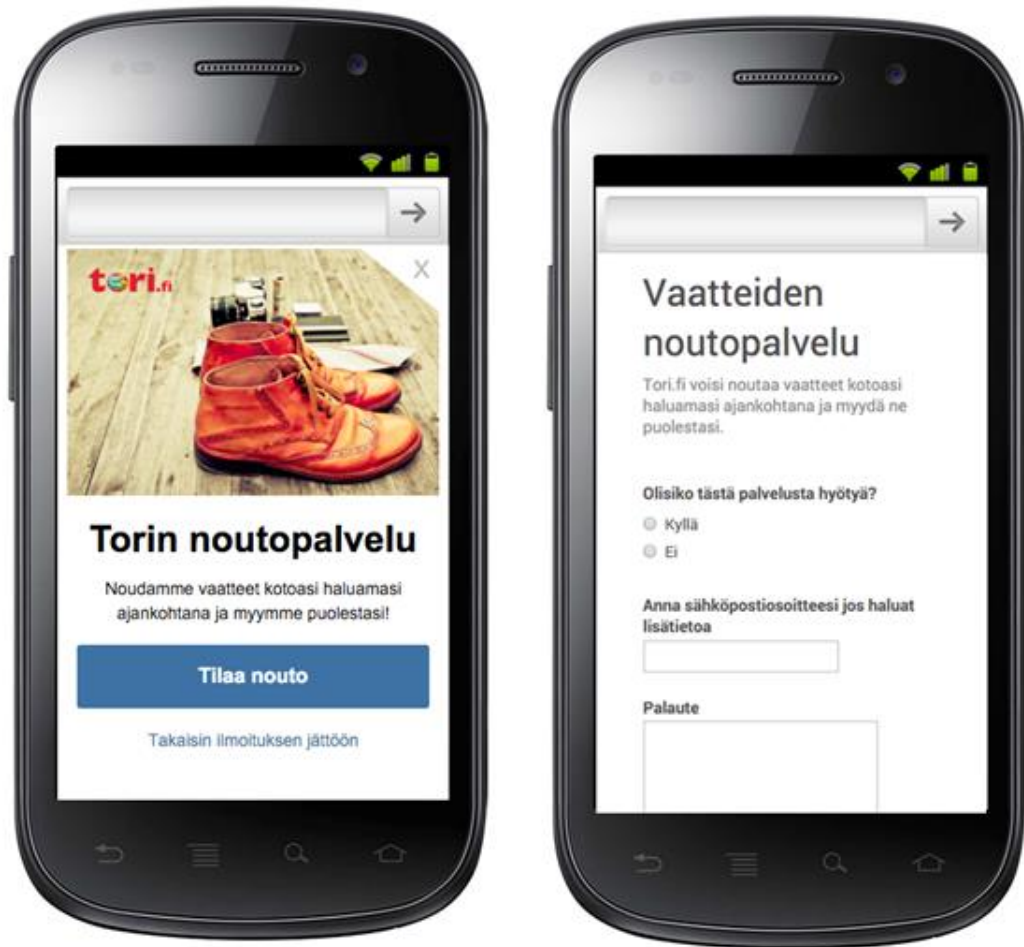


Figure 45. Tori pick-up service experiment

The screen on the left side (Figure X) is the pop-up banner that appears when user selects “Clothes and shoes” category when adding a new selling ad. This banner is in Finnish language since the site is also in Finnish. The banner title says “Tori pick-up service” and it is followed by a smaller text that says “We will pick-up the clothes from your house, at the time you want, and sell them for you!” There are three actions that the user can do after seeing the banner:

1. Back to the selling ad, by pressing the text in the bottom.
2. Close the banner, by pressing the X on the upper right corner of the banner
3. Order pick-up, by pressing blue square-shaped hyperlink.

Out of these three options the two latter ones have the same outcome; the banner will close and the user can go back to filling the selling add. The three different options that are measured are emphasized in the Figure X below.



Figure 46. *Pick-up service experiment key metrics*

The action three, which is the “Order pick-up” link, is the most important to follow in this experiment. This link is done in a way that it seems for the user that the service really exists and the user is actually ordering a pick-up by pressing the third options. However since this is just an experiment to analyze the real need there cannot yet be real pick-up service behind this link. Therefore the user is directed to the form illustrated on the right-side screen of the Figure 46.

This form is also in Finnish and the title says “Pick-up service for clothes”. This is followed by text “Tori could pick-up the clothes from your house, at the time you want, and sell them for you”. The first question in the form is “Do you think this service would be useful?” and the user can tick the box and answer either “Yes” or “No”. This is followed by text “If you want more information, please provide us with your e-mail” which is an open form. The last box says “Feedback” and here user can also write anything. The idea of the form is to collect user feedback out of the idea and to confirm that they are really interested in the service. The form part is more for additional information and it can give a deeper understanding of the overall results.

The user reaction to the banner was researched over the experiment with Optimizely A/B testing. It basically tracks the user clicks and behavior on the site. By comparing versions of a webpage or app against each other it tells which one performs better. A/B testing is also known as split testing. The idea is to shift from “we think” to “we know” by measuring the metrics. (Optimizely 2015)

5.4.2 Results

In this chapter the experiment results are presented. The experiment was released on the mobile site on the 17th of November 2015. It was active for a total of 7 days and taken off

on the 24th of November 2015. The Table 6 presents the results of the Optimize A/B testing on three different actions illustrated in the previous chapter.

Table 6. *Pick-up experiment results*

Action	Amount of users clicked	Percentage
1.	889	48,1 %
2.	868	46,9 %
3.	92	5,0 %
Total	1849	100,0 %

For this experiment the amount of unique visitors reached a number of 1,971. Out of them the amount that according to Optimizely A/B recorded to press either one of the three options was 1849. Out of these users 92 unique visitors clicked the “Order pick-up” banner. This gives a CTR of 4.98%. Out of these 92 visitors 28 answered to the form and left the contact e-mail. 26 of them answered “Yes” to the question “Would this service be useful” and two users answered no. 45.17% of the visitors clicked the close button on the banner and 44.11% clicked the “Back to the selling ad” link. On the Figure 47 the key points of the results are shown.

ACTUAL RESULTS

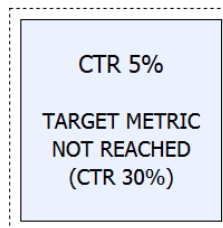


Figure 47. *Experiment results*

What it comes to CTR the results are a lot lower than the desired target metric. In the following chapter the results of the experiment are analyzed further.

5.4.3 Insights and Discussion

After the experiment the team gathered to discuss on what do the results indicate and why the experiment conducted these results. This part covers the last three sections of the loop tool (Figure 32). The goal that the team had set to the experiment (30% CTR) did not come close to being reached. The experiment was not as widely adopted among the Tori sellers that the team in the beginning thought that it would. The team discussed on what the reasons behind the results could be. Different factors came up on why the experiment did not reach its goal. The key reasons, insights are presented in the Figure 48 with the decision made based on them.

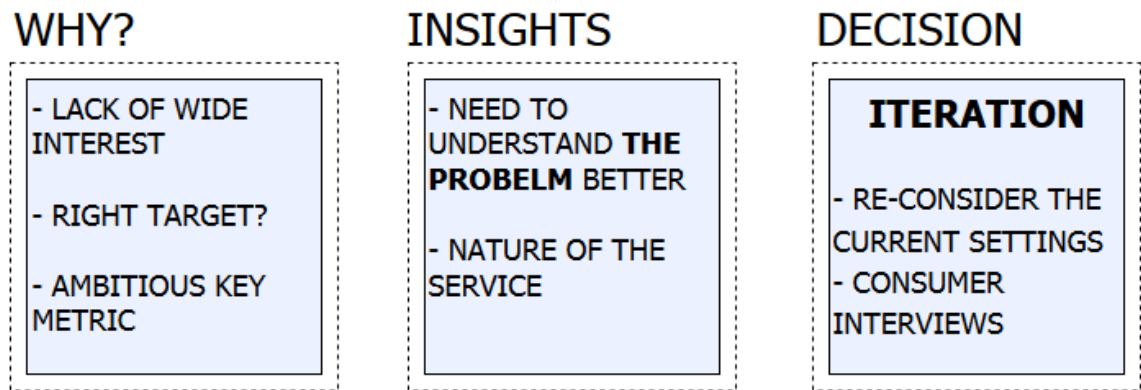


Figure 48. Reasons, insights, and decision

Such things as targeting the right user group and the banner bothering the users were also considered previously when planning the experiment. The experiment was targeted to the sellers of clothes and shoes. Since the banner was located in the selling ad it means that the user is already engaged in the actions of pricing, selling, and organizing the physical transaction of goods to the buyer. It is possible that this type of service could awake more interest on the people who are not yet sellers of Tori, or at least not in the actual selling action at the moment. The seller can have a specific prize in mind for the products and he or she has probably already decided on lot of things related to the selling process. The service where the clothes would be sold by Tori could activate new sellers as well as some of the current sellers to sell more items. However in this experiment the target was only on the current sellers that were also in the starting point of their selling process in Tori. The team also acknowledged the risk of users getting bothered over a pop-up banner, so that can also have an effect on the results.

The target metric was set based on thoughts of the team members and the previous mobile app experiment. The mobile app experiment clearly stated “Download free app” and it reached CTR 20%. In the pick-up service experiment the visitors did not know how much the service costs which can be one reason why some people did not click the banner. Or at least it can be considered as one significant difference between these experiments. If the pick-up banner would have stated “Order free pick up” probably the result would have been a lot higher. Considering this again, when knowing the results, the target metric was probably set too high. However, still cannot be denied that the pick-up service did not engage too much interest in wide scope. The experiment was testing for the consumer interest towards the solution. Probably it would have required going a bit deeper with the problem and customer first, instead of yet with the solution.

It was now important to understand what do the results indicate and did the results confirm or dismiss the leap-of-faith-assumption and the hypotheses tested. The hypothesis can be considered as failed in the experiment, as it did not reach its target metric. The team still agreed that it requires more critical understanding on what happened and why. The leap-of-faith-assumption “The user wants Tori to pick-up multiple items at once” was not yet

totally dismissed but could not be considered as validated either. The experiment results indicate that at least the majority of the sellers are not interested on the pick-up service in this context. However there were still some users, although being a relatively small amount of the total users, who were interested and left their contact information. These users are the likely early adopters for the service, which is a critical and important group for the development process.

It was considered that the experiment results indicate a signal on the lack of wide interest for the pick-up service. However the team thought that although the result is a lot lower it is still not a complete fail. The members agreed that there are certain things that are not understood in detail enough. That is why the data was topped up by customer interviews from different user groups. The team came to the conclusion that the experiment by itself does not give enough information, neither on why did the experiment fail, nor was the leap-of-faith-assumption right or wrong. The experiment results indicate that this type of service would not be adopted by large audience immediately but it would highly increase customer satisfaction for those people who would need it.

Therefore based on the workshop and mobile experiment's insight, the following lean startup cycle leads to alterations of the initial setting. It cannot be directly persevered since the goal for the experiment was not reached. The team also considered that pivoting the idea completely would be too hesitant. So some iterations to it were made and the setting was approached differently and this way to understand it further.

5.5 The Consumer Interviews

From the lean startup process perspective the consumer interviews could be seen as starting a new round of the feedback loop. Focus of this loop is more on the beginning determination of the loop settings. This includes the first parts that were determined in the beginning of the workshop - challenge, problem, customer and the solution parts. The consumer interviews result in qualitative data that could for example be later validated further by the lean startup principles with quantitative data.

5.5.1 Overview and Objectives

There were ten interviews made in total. Four can be considered as early adopters for the pick-up service and the other six as other normal Tori users. The data collection in this part was conducted with semi-structured interviews. A semi-structured interview is a conversation-like situation where the decided themes are being discussed. This means that the interview is not following an accurate or detailed structure. The questions are not strictly formed before-hand but they are adapted to the themes that are determined before-hand. The talking order is free and all the interviewees are not discussed on all the themes on the same depth. (Saaranen-Kauppinen & Puusniekka 2006) The interviews were divided into three different themes. These themes are:

- The consumer needs related to the pick-up service,
- Selling in Tori,
- Handling excess second hand items in general.

At first the interview script was made focusing on the early adopter interviews. Early adopter in this stage was assumed to be the person who had addressed interest by leaving the contact information to the form of the experiment, and also replied to the e-mail query. The used interview script and objectives for the early adopter interviews are illustrated in the Appendix 1 in English and the original Finnish script in the Appendix. The early adopter interview focus was on the most critical problems, selling behavior and needs. The following objectives were set for the interview:

- To understand consumer needs related to the service. What features are considered meaningful?
- What are the most critical problems related to selling behavior in Tori? How about in more general level regarding to used and excess second-hand items?
- What problems the pick-up service would actually solve? Are this problems critical and worth solving?
- To understand the consumer behavior and to confirm or disprove the previous assumptions better (e.g. leap-of-faith-assumption: The user wants Tori to pick up multiple items at once)

For the non-early adopters, the normal users, the interview structure and content was changed a bit. The idea was to emphasize some elements of the problem interview principles that Maurya (2012a, pp.81–124) presents in his book. The conducted web experiment and the early adopter interviews are validating more on the solution already, and serving as a MVP, instead of focusing validating the problem. However this experiment. Therefore the focus of especially the last interviews was more on the problem and the user needs, instead of the pick-up service. The idea was to understand more on what type of problems are the consumers facing when selling in tori or when handling with their used excess items in general. This should help to understand what kind of problems the potential pick-up service could solve and not until after this to think of how to solve them. Also based on one interview it seemed like the interview can go easily off the track, if people are being told about the pick-up service when they are not already familiar with it.

All of the interviews were made as telephone interviews. Out of them eight were recorded and transcribed to text. The other two interviews failed to record so their content was utilized based on notes made after the interviews. The generated text was analyzed by first reading the interviews multiple times. The content of them was then divided into smaller parts and grouped under different themes. The themes content were then analyzed, and correlations, differences or perspectives were discovered. (Saaranen-Kauppinen & Puusniekka 2006) The transcribed text was divided first by following the themes that are presented in the interview script structure. Later also division was made further based on some appeared themes.

5.5.2 Data Collection Description

Basically all of the interviews were executed over one week, from the 8th of December until the 15th of December. Six interviews were scheduled with an e-mail. The rest four were directly called and they agreed to participate. At first there was an interview request e-mail sent to all of those who left their contact information on the web experiment form. This group was particularly important in order to interview the possible early adopters of the service. In total there were 19 e-mails that could be contacted based on the information left. Out of them five people agreed to be interviewed. After this there were similar type of e-mail requests sent to the people that had recently left selling ads in Tori. A list of consumer contact information was received from the company for this purpose. This included a list of contact information of people who had recently published selling ads in Tori. This e-mail request was sent to 61 e-mail addresses, out of whom only one person responded. After this the last four people were contacted by just calling the numbers on the contact information list. The goal was to interview the early adopters for the pick-up service as well as the other Tori users.

The individual interviews were conducted to ten people. The interview length and depth varied slightly between these interviewees. The recorded interviews lengths were between 9 and 23 minutes. There were a few background information questions asked from the interviewed people. The overview of the interviewees is demonstrated in the Figure 49.

Early Adopters				
Female,40 years Three children	Female,26 years No children	Female,36 years No children	Female,25 years One child (baby)	Female,51 years Three children (adults)
Recently signed user, mainly m-site usage	Monthly seller, uses Computer & m-site	Few times a year seller	Active m-site user, monthly selling	Active m-site user, selling every few months
Female,65 years Four Children (adults)	Female,26 years Three Children	Female,40 years Two Children	Male,46 years Few children	Male,27 years One child and one coming
mobile app user, quite active user	Active m-site user, almost constantly selling something	Relatively active user, sells more items at once	Active user, uses with computer and wife with tablet	Active user, uses with computer, tablet, and mainly mobile app

Figure 49. Interviewed consumers

In Figure 49 each square indicates an interviewee. On each box the sex, age, and whether the user has children is addressed. Below this information is described the common usage of Tori. The early adopters are highlighted in the Figure X. They are female between the ages of 25-40 years. After the interviews four of the people were considered early adopters, although few more interviewees assessed their interest towards the pick-up service. These users said they would use the service, but were however slightly too hesitant to be included in the early adopter group, who according to Ries (2011, p. 62) is the customer who feels the need for the product most acutely. Out of the interviewed people eight were women and two men. Most of them consider themselves quite active users in Tori, and they mainly use the mobile site version. Most of them also buy items from tori and browse it, and likely belong to the super user group of Tori.

5.6 Results of the Consumer Interviews

This chapter illustrates the results of the interviews and the insights and discussion made based on them. The results are shown under the three different themes, which are the pick-up service needs, selling in Tori, and handling the excess second-hand items. This is followed by a chapter that focuses on the insights and analysis over the results.

5.6.1 Pick-up Service Needs

On the pick-up service theme the most important people who were interviewed are the early adopters. These users expressed just based on the MVP that they were ready to use the service. The first thing they were asked when being interviewed was to tell in their own words what kind of feelings did the web banner awake in them. All of the four early adopters expressed their need for the service. The reasons for the needs were somewhat similar to each other.

One of the early adopters referred to her experiences in flea markets when she was being asked about the opinions on the pick-up service. She said she was trying to sell some items for a month on a self-service flea market. She paid the rent for the flea-market table. On top of that she had to go, 25 kilometers away, to price tag the items and every once in a while to go check if the items are being sold or not. On top of that she said she did not make as much money as she had hoped for. She says that at the time of the interview she had few large refuse sacks of stuff waiting for her to have time. She said she “does not care if she would only get 50 cents out of it as a revenue”, but just hopes someone would do the job for her.

This was common for all the early adopters. They addressed a problem of being somewhat disappointed in the alternatives they currently have for handling the used excess items. They were not that worried for example about the price of the pick-up service, but instead on having to put so much effort or to give stuff away totally for free. Another early adopter said she was earlier selling in social media group and flea market, but also found it too

effortful to go every day to check on the items on the flea market. She also thought that when selling in Tori and social media platforms the communication and arrangements with the buyers can demand a lot of effort. Few other interviewed people agreed on this, and for them the most common perspective was that the pain level of the communication and arrangement problems depends on the buyer. Basically all the users who addressed this topic, said that they it can vary a lot since they have had both very easy buyers, but also very demanding buyers. “Some of them want to test the cloth first before picking up whilst some are so easy that they just come to pick the items from your door and leave” said one of the early adopters.

The price the users would be willing to pay for the pick-up service was brought up in some of the interviews. However at this point the idea was not to get a specific number but more of a sense on the thoughts about the price. Also since the price is effected strongly by the features of the solution, which at this point are extremely uncertain, it is not realistic to assume that the numbers stated at this point could be taken too strictly. Mostly the answers varied between 20-50% of the selling value. One non-early adopter interviewee thought that the service should be free, or only cost for a very low price of around few euros. Another one thought that for example 10-20 euros could be possible price for the service, also depending on what it would include.

Such things as creating selling ads and pricing the products did not seem to be the most critical issues for the sellers when being asked about it. One of the users said that everything is working very well and there are no problems in these parts of the selling process. Another user said that because of the mobile site version, downloading the pictures and creating the ads is easy. If the users have many products being sold however, many of them admitted that it requires time and effort. Especially the early adopters saw this part more as something that they would like to get help to. For them neither this was as straightforward, since all of them said that this is also dependent on the product being sold, when being asked if they want Tori to do the pricing and selling ads for them.

The responds were quite similar in such topics as pick-up time, pricing and returning. Pick-up time was not considered very critical factor and most of the early adopters did not express the speed or the timing to be that important. When asked to estimate a suitable pick-up speed, most of the early adopters answered about one to two weeks after the pick-up order.

All of the early adopters said that it depends on the product whether they want the products being returned to them or not. Also on the question of Tori to do the pricing and filling the selling ads for them, all of them expressed that it also depends on the product being sold. So in these topics, the early adopters seemed to value different alternatives, instead of a ready-made solution. They want that different types of products are handled in different ways. The items that the early adopters would use the pick-up service varied, although in many cases the conversation was around clothes and accessories.

5.6.2 Selling in Tori

Most of the users were satisfied with Tori as a selling platform and the feedback was often positive when they were directly being asked about things related to Tori. All of the recognized problems and needs the interviews were indicating, are not a straight result of asking the interviewees about the problems specifically in Tori. Usually the problems came up when the users were being asked about their behavior in more general level. They were also being asked to express a specific part of the selling process that they find more ‘painful’ over the others.

Figure 50 gathers all of the factors that came up in the interviews, when discussing about things that can bother the consumers when selling in Tori. Some of them were considered more painful than the others, while some of them, like difficult buyers and low profit, were mentioned in more than one of the interviews. Lot of these problems are the kind of things that are not only related to Tori, but also in general level second-hand market.

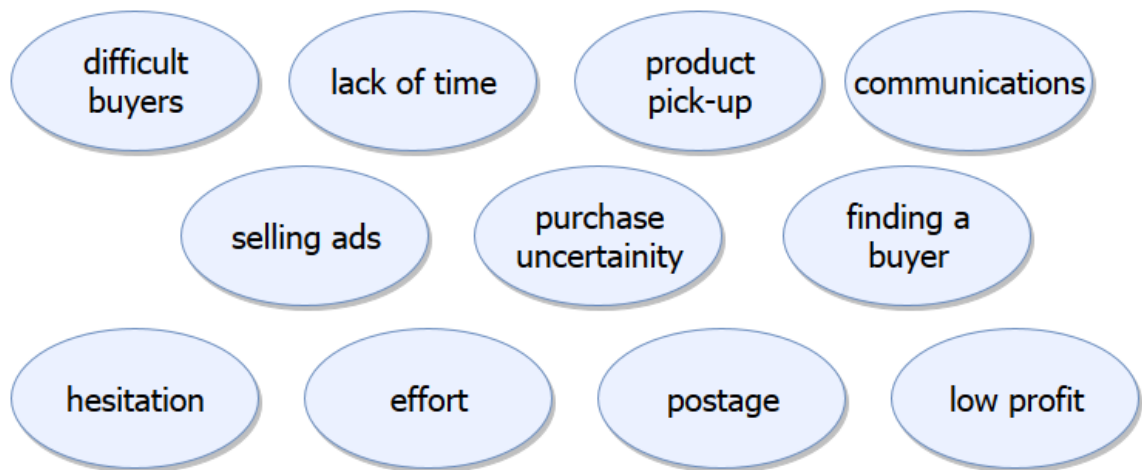


Figure 50. Consumer problems

Low profit for example most users seemed to associate with selling second-hand stuff in general and a lot of them did not have high expectations on getting high margins on their sold items. This was common not only for the early adopters, but as well for the other users. However, although some interviewees mentioned the low profits with Tori, this was considered also to be a more general level problem of the second-hand market. Some of the users said they actually get their things sold better in Tori and find buyers faster there. In many cases the profit was seen as something that the consumers would like to receive at least in some level. The items the users said to sell in Tori varied and was not really narrowed down to a specific category. Most of the users said that they are selling mixed items.

One thing that bothered few of the users was the uncertainty of the purchase in Tori and social media platforms. Instead of committing to purchase, the buyers just contact the seller. “Sometimes first they are asking about a product, then you don’t hear about them,

until in few weeks they ask about it again. Then the same few weeks for the second and the third time. Then you just have to wonder if they want to buy it or not” one user explained.

5.6.3 Handling the Excess Second-hand Items

Nine out of the ten interviewees considered generally owning quite a lot of excess items, when they were asked about it. Especially the early adopters saw this as a problem, and expressed that they hope getting rid of the excess second-hand things would be easier. One of them said to previously be the type of person not to throw things away. However now she is “getting fed up with not having enough space”. Another early adopter said she often makes impulse purchases that she regrets later. Mutual for all the early adopters was that they recognized the problem of having too much items, and their primary goal for used items is to get rid of them. Also most of the other users recognized the same problem, but all of them did not see it as critical of a problem.

Generally the excess stuff that the responders said to own varies from one category to another. The items that were mentioned most commonly were clothes and accessories, and all kind of mixed stuff. One of the responders told that she had sold all the movables of a house in Tori. Another one told to be the type of person to collect excess items for a selling purpose. She makes it as a small side business, and at the same time tries to get rid of the excess items.

When being asked about the goals for the excess items, the answers varied between different types of items that they own. However, almost all of the interviewees said to own the kind of items that the goal is simply to get rid of them, and hopefully get some money back. Other types of goals were also recognized. Four of the users said that they also want to make money out of the sold products. For most of them however this was not that much about making a profit, but more about getting some of the spent money back. Almost all of the answers were basically in between two factors that were getting money out of the items, or getting easily rid of them. Some of the answers emphasized more over the profit, as some did not care at all on how much they get back from the product. Common was however that the responders were not that pleased of the idea of giving away things totally for free

5.6.4 Insights and Discussion

Tori pricing and returning the items were the kind of themes on which the consumers did not directly express a specific need towards one way or another. In these topics they seemed to value more on having different opinions instead of having a strict vision on how they want it to be. However in this interview the discussion was not focused for example on specific type of items. The answers could have been more specific if they would have been asked about a more specific case or item. The answers indicate that

almost all of them would like to price and get returned their items, if they are more valuable or expensive. If the items are cheaper so called “flea-market stuff” the early adopters do not care to set the prices or want the items back. Basically the less valuable the item is the less they care about getting their money back out of it.

The results indicate that there are specific user cases that could be focused to come up with a solution that answers the critical consumer problems. Or at least that they are worth proceeding with. Based on the lean startup methodology the next step should be to still go further to test the leap-of-faith-assumption and based on that to decide the next steps. Although this in this thesis examines quite a lot of data around the topic, there is still not enough specific data to proceed towards a certain solution.

Previously on the second chapter the logistics customer service element are shown on the figure 2. If an individual customer service elements significance should be emphasized on top of the others, it would be flexibility or convenience based on the interviews. Also this is the feature that the tested solution would emphasize the most. The distribution service has to be flexible to begin with, but the responds indicate that flexibility can be considered as the most important individual factor in lot of different ways. The consumers valued having the ability to choose between options in many features and wanted the service basically to make things easier for them. Other elements also have to be balanced but for example time seemed to be less critical factor for the responders. It does not mean that the other factors should be ignored, but that some factors seemed to be considered more meaningful than others. However it should also be considered if these early adopters clicked the Time, dependability and communications are also very important elements to fulfill in proper manners.

What was interesting about the responds is that flea market appeared in almost all the answers in one way or another, and it was often considered to be time or effort consuming compared to the money that the seller earns from it. Lot of the problems with excess stuff that the consumers were asked to describe were related to selling items in flea markets and the work they have to go through. Other things mentioned that the users did for their excess items, were usually flea-market, Facebook groups, and give away or recycle. These options and some of their positive and negative aspects, based on the different answers, are collected in the Table 7.

Table 7. Common second-hand handling options

	+	-
Tori	access to buyers	difficult buyers (occasionally)
	easy to sell and use	
Flea-market	sell all at once	effort and time consuming
		(pricing, visiting), not enough profit
Facebook	access to buyers	difficult buyers, uncertainty of
		the purchase, communications
Recycle / give away	good conscience	no profit, effort

Comparing the different options is not as straightforward since consumers can have different purposes for different products. That is why the Table 7 is for a reference to give an overview on the common options and how they relate. The idea is not to give any exact data here, but to show how the things correlate to each other, and which direction the development should head towards.

Many of the interviewees assessed that flea-market is too effortful, and they are not satisfied with the profit. Still they say that they go to the flea-markets and go through this trouble to get their items sold somewhere. There are not really established practices that would target the flea-market sellers and offer them a solution that could minimize the selling effort without giving too much out of the profit. The key here is to understand how to make the selling easier for the consumers, without requiring them to give too much of their profit. If solution is not the optimal, at least better in some dimension than the available option. Tori already has a lot of engaged customers and sellers are satisfied with Tori as a selling platform.

From the problems presented in the Figure 50 three different main themes can be recognized. The selling problems can be divided to be related to communications, effort, and profit of sales. They are divided in the Figure 51.

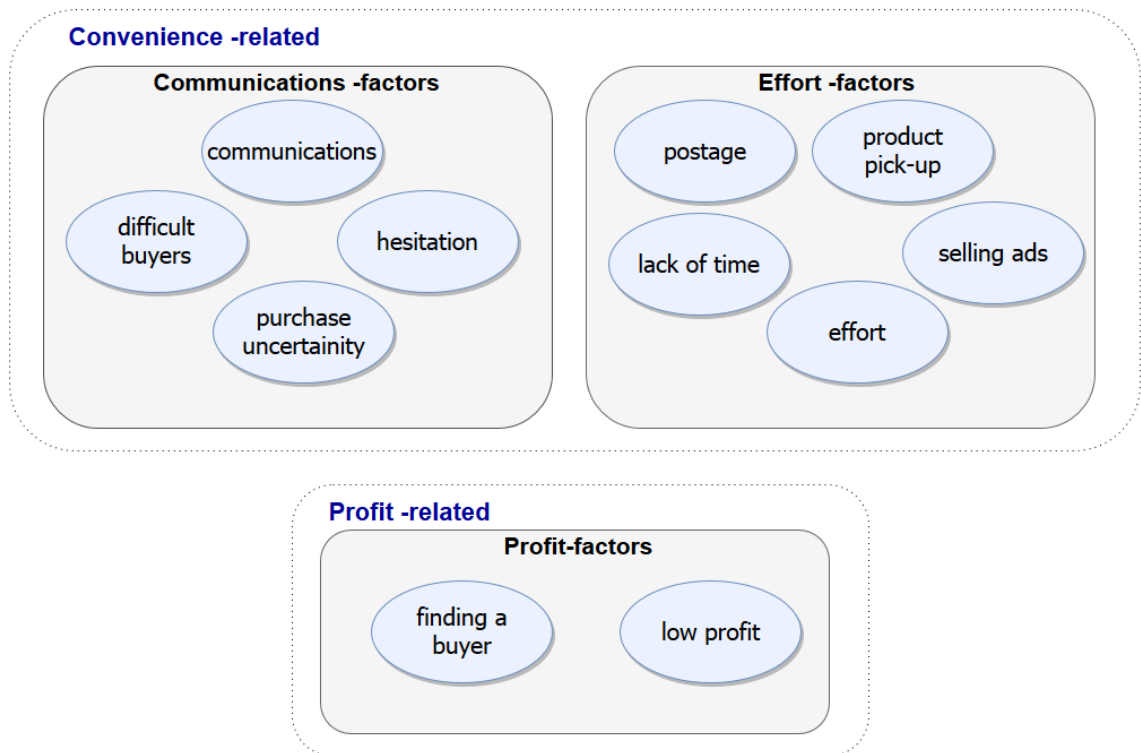


Figure 51. Selling related problem factors

Three main areas that the customers pointed out were related to communications, selling effort and selling profit. These were further divided as convenience and profit related areas. In relation to this, the selling behavior related to primary needs between selling profit and convenience is illustrated in the Figure 52.

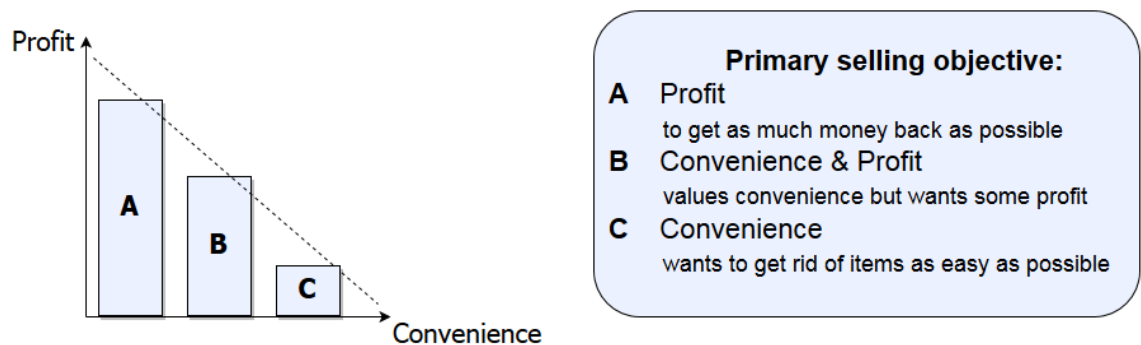


Figure 52. Seller types based on primary selling objectives

Primary needs for selling can be seen to locate always somewhere between the profit and convenience related factors. To simplify this, in the figure 52 the sellers are divided into three different categories based on their primary needs. These three types can be understood as different type of sellers, but they can also vary for different products. One seller can have more than one type of products, and therefor also more than one type of needs. The early adopters highlighted the C seller type, at least to those items they would use the pick-up service for. Most of the users can be seen to belong in the B group, but can also have some products or needs from A and C groups. The idea of this division is

to understand further what type of needs can be answered with different services. For example the A type of seller is less likely to pay for a service that eases the selling, since primary goal is to get the maximum profit. For this type of seller a service that would support the selling for example by enabling to get more audience for the product could be useful. At least one of the interviewees emphasized this type and also said that would not use the pick-up service that was experimented.

6. SUMMARY OF THE FINDINGS

This chapter demonstrates the key findings of the study. In the first part all of the findings throughout the process are summarized. After this the suggested service type recommendations for the case company are presented.

6.1 Key Findings

The results for different stages are previously presented separately in different chapters of the study. This Chapter combines the findings from each part of the development process, and they are collected on the Table 8.

On the Table 8 different process stages are shown under the build, measure, or learn heading. The first row collects the first stages that were the background analysis, workshop, web experiment, results, and insights. The second row describes the parts of interviews planning, interviews, consumer feedback, and consumer needs. On the third row the key points of the further results, conclusions and recommendations are collected. They are discussed more throughout in the Chapter 7 of the study.

Table 8. Results and findings on different stages of the development process

Build			Measure	Learn
Background analysis	Workshop	Web experiment	Experiment results	Insights
Theoretical input: consumer services & logistics, segmentation: Female& Fashion, personas, lean canvases	Ideas, leap-of-faith-assumption, experiment design → initial pick-up service	Pick-up service banner on Tori mobile site	Key target metric not reached, 5% CTR (30% CTR target), 1849 users	No wide interest, setting the right target, ambitious key metric → iterate for next phase
Interviews Planning	Interviews		Consumer Feedback	Consumer needs & insights
Interview focus, objectives, themes, contents (Appendix 1 & 2)	10 consumer interviews (4 early adopters) on themes related to pick-up service, selling in Tori, and handling excess items in general level		Different needs for different products and users. In general satisfied on selling in Tori	Most of the selling problems related in profit or convenience. Different seller types.
Further results, conclusions and recommendations for the further development				
Lean startup process findings & suggestions for further development, service types, methodological, theoretical, and practical implications (See Chapter 7)				

Consumer logistics principles, customer service elements, and trends were utilized in the development of the initial service concept, and lean canvases. Lean startup methodology was further studied in more theoretic level, in order to apply it properly to the case. The literature review enabled the proper utilization of lean startup, although some of the tools and methods were adjusted to fit the academic purposes as well as the Tori case organization development. On the pre-workshop part the segmentation and focus were determined. In this stage to support the development, focus segment of the development was narrowed to the Female and Fashion segment, eight different personas and three lean canvases were filled out. In this part the lean canvases and personas represent the best guesses to support the development, so this was done based on the previously presented theory, combined with the ideas of the researcher.

In the workshop the focus for the development was selected, including the leap-of-faith-assumption as “The user wants Tori to pick-up multiple items at once”. This assumption was further tested with the mobile web experiment. The experiment was a banner about the pick-up service, which also served as a MVP. It was released on the Tori mobile site and targeted to the sellers. The experiment did not reach its goal what it came to CTR, and only about five percent of the desired 30% of the targeted users saw the banner. The reasons for the experiment failing were further discussed with the team. The target metric was very ambitious, and probably in this sense the expectations were set too high. Targeting the sellers who are already prepared to sell in Tori might be less likely to use this type of service, since they are already prepared to go through the process of selling. No matter what the reasons were, the results indicate that the interest towards the service as it was presented, was not as high at this point that the team first expected. This was further discussed and decided that the development setting should be examined further. From lean startup perspective this would mean an iteration to the setting, instead of a strict pivot or persevere.

Ten consumer interviews were conducted to understand the user needs and problems in deeper level. The consumer interviews conducted different findings on what the consumers find critical related to handling their excess items and selling in Tori. The consumer interviews by some extent indicate that the development should be taken further, but yet still also changing the perspective and solution features. The results of the interviews were analyzed further. Based on the interviews the relationship between the critical need factors related to selling profit and convenience was presented to understand it better.

6.2 Suggestions for the Case Company

Although individual second-hand items would not have significant financial value in them, linking them with services creates a huge potential. This combined with the need

for better solutions shows a significant area for development that could benefit all the parties involved. Adapting the practices of circular economy could have significant impacts from the economical perspective. Tori could in some level focus more on offering a service where the second hand item would serve more as an operant resource instead of the main focus.

If the focus is on particular items, basically in all the current options for excess items, the solutions compromise somewhere between the seller profit and convenience. An interesting aspect to consider is that what type of service could maximize both of these factors to the user. Another important question further would be how to do this in a way which is also beneficial for other parties involved.

In Figure 53 the different second-hand options are estimated from the consumer seller perspective. On the vertical axis is the profit that the seller can receive from the item, after all the possible selling related costs. Horizontal axis the convenience of selling and it describes all the work related to the selling process. This is basically a combination of the communications and effort factors presented earlier on the Figure 51. The positions of different second-hand handling options were evaluated based on the consumer interviews, and related references.

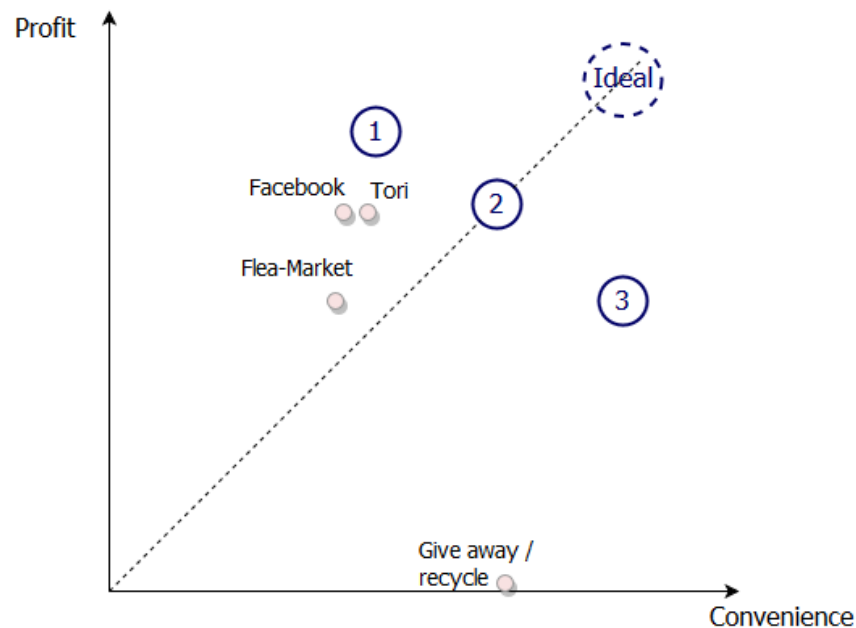


Figure 53. Options for second-hand items solution approach

The recommendation in this case is that the delivery-related service solution is either on the illustrated 1, 2, or 3 position on the graph. The solutions in relation to Tori's current situation can be hereby written in following forms. From Tori's perspective the solution could be a service that:

1. Slightly increases the profit, without sacrificing any of the convenience of selling;
2. Slightly makes the selling easier, but does not lower too much of the sellers profit;
3. Significantly increases the convenience of the selling but also lowers the seller profit.

The ideal service would naturally maximize both the profit and the convenience, and that should be seen as the direction for the development. However if being realistic about the service and how it could serve different consumer needs, these three options already give some division between different types of users and on towards what direction to take the development. The target user and their sold product types for the three types of service types could be very different. Figure 54 summarizes the three options from the case company Tori perspective.

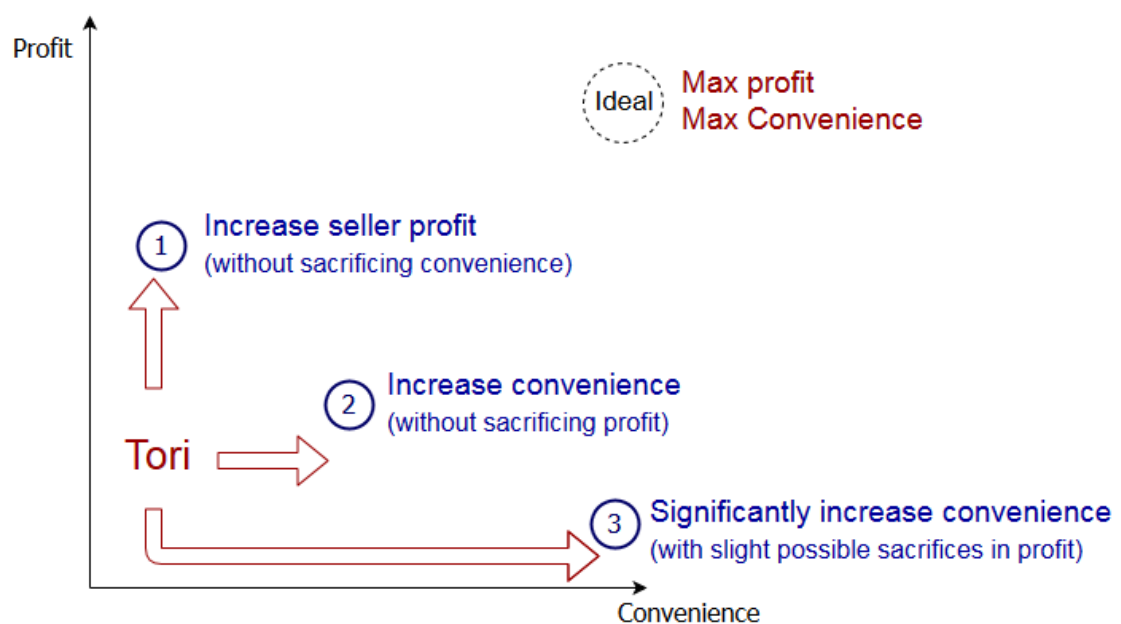


Figure 54. Service types from Tori perspective

First solution type is slightly stricter than the others what it comes to flexibility of the convenience to seller. Convenience is something that obviously should not be sacrificed, since Tori is a platform that aims to make the selling and buying as easy as possible. Therefore the first solution type is a service that makes better profit possible for the seller, without sacrificing any of the convenience. This could be achieved by for example getting better visibility for the seller. However in this option it is hard to determine what factors directly are effecting the profit and especially on how to change them.

A simple example of service solution type 2 could be to link a logistics collaboration or bidding service with Tori. In this type of service there is a risk of the consumer profit lowering since the consumer pays for the delivery. The consumer would not necessarily want to pay for the postage, if he or she does not feel like getting enough ‘relief’ out of it. The balance between the profit and convenience is critical in this type. The solution by

Jófogás, presented in the chapter 4.2.3, for example takes out a bit from the sellers profit as he or she is the one paying for the pick-up, but this is benefited as an increased convenience, since the product gets more potential sellers and is maybe sold faster. Although, the seller profit does not necessarily decline in their solution, since the seller can possibly sell the item for better price as it gets more audience. The profit can therefore even get higher for the seller, since more potential buyers are reached.

The emphasis on this research has been on the solution 3 type of approach, which the previously experimented service would also be. In this type of solution it is important to find the right target group. It is possible that they are not the current Tori users, but instead the flea-market users for example. For the solution 3 it is likely that the sellers would have to sacrifice a bit more from their profit compared to the solution 2. The selling process would be significantly easier for them, but in most of this type of solutions they would likely have to sacrifice some of their profit. Examples and emphasizes for different solution types vary. They are presented with more detailed factors in the table 9.

Table 9. Suggested service type features

Service Type	1	2	3
Objective	increase selling profit	increase selling convenience	significantly increase selling convenience
Emphasize (how?)	Make products visible for more buyers, provide ways to make product more approachable etc.	ease the selling process: delivery, communications, payment, etc.	full-service: Minimize any seller effort
Primary target (who?)	Seller A	Seller B (& A)	Seller C (& B)
	Tori, competitor & Facebook users	Tori & competitor users	Primarily attracting new users (e.g. flea-market)
Observations	emphasizing the right factors	pricing, packaging	harder to approach
Negative aspects	implementation, right solution	operational costs, the actual need	lower seller profit, operational costs

The first row of the table describes the objective for different service types. The next row determines what to emphasize in the specific solution. The third row is the primary target group, which is described based on the types presented in the Figure 52. Last two rows illustrate the observations and negative aspects related to the suggested solutions. One solution is also to try to combine some of the elements from these solutions, as they are

created merely based on the primary needs. A solution that combines service type 1 and 2 can be a solution that consumers would appreciate, but also to be harder to realize.

Recommendation for the case company is to utilize the approaches presented in this chapter. Table 9 can be utilized as a framework for combining services with the marketplace environment, or it can serve as a reference for further development. In lean startup method, the objectives listed in the Table 9 can act as challenges that would be tackled further with the development. The assumption here is that the different service approaches primarily attract different types of customers, although one customer can have more than one type of needs.

The development of the service concept would require experimenting and further development with lean startup. Further iteration for the development process should include some modifications based on the consumer interviews. They do not indicate that the studied service concept should be pivoted or persevered, but that it could be modified. Continuing further with the service concept development presented in the Chapter 5, with the focus on selling multiple items, a suggestion for further development is to change the target group of the following experiment, or to conduct an experiment that would approach the issue in differently. The consumer reactions should then be measured, and compared how this reflects in relation to the previous experiment. The results indicate that in this full-service type of solution the most important aspect is the convenience that it would offer to the seller. In this type of solution it would be useful to find the customers who value this over the other factors, and to learn more from them.

As due to limitations this research did not get closer to the final service solution, the suggestion for the service cannot be presented in very detailed level. However this research presents a preliminary setting for the service concept development, and suggests on how to understand the seller behavior better and approach the combination of services and C2C.

7. CONCLUSIONS AND DISCUSSION

This chapter presents the conclusions and the discussion. The purpose is to explain the results presented in the previous chapter and further answer the research questions. This will be tackled in the beginning. After this the study is critically evaluated.

7.1 Results Analysis

The first research question was determined as *what are suitable approaches for consumer services and logistics?* In literature the significance of services is emphasized (see e.g. Grönroos 1998; Jaworski & Kohli 2006; Helander et al. 2013). In this study an important approach was S-D logic from Vargo & Lusch (2004), where the product is viewed as an instrument for providing a service, which is often created in co-operation with the customer. These principles were utilized further in the development as service focus also became more significant approach for the development setting. In logistics the last mile issue was considered relevant emphasis for the topic, as there are yet no established practices for home deliveries (Punakivi et al. 2001). For this setting of C2C environment these particular areas were considered meaningful to understand.

Second research question for the study was *what is lean startup ideology and methodology?* This study overall examines the question in multiple occasions and from two different perspectives – theoretical and practical. Lean startup theory is presented and the empirical part follows its principles. Previously in the theoretic part lean startup was defined as a set of practices to deal with extreme uncertainty, or a business development method that combines principles of lean with agile development to innovation process (Ries 2011). Although this is a definition of lean startup, the approaches show that it can be utilized in many different ways, and leave room for interpretations (see e.g. Blank & Dorf 2012; Cooper 2014b; Maurya 2015).

The fourth supporting research question was *what type of service concept would serve the C2C selling needs?* This issue is analyzed on the 6.2 chapter of this study. This gives a framework for understanding needs related to selling, although it works more as a reference, instead of giving a final solution for the service concept. This perspective divides the selling issues to convenience, that includes communication and effort related factors, and profit related problems, and suggests that the primary seller needs could be fulfilled better by providing a different type of service solution for each of them.

One of the supporting research questions was *how is C2C as an operational environment?* Theory application made it clear that C2C environment is not widely examined, although it has been increasingly growing and lot of its features are different to B2C commerce. C2C marketplaces recently have been establishing even more significant role in overall

e-commerce (e.g. TNS Gallup, The Federation of Finnish Commerce & Finnish DMA 2014). The transactions between the consumers can be seen as a huge opportunity especially for service providers to get involved to the transaction process. This is also ideal for circular economy principles, where the value of the product remains or is increased over and over again. Systematic practices of combining services with C2C commerce are lacking. This study presented one approach for this, that examined a full-solution type of service to serve the C2C seller needs better.

One important and possibly the hardest lower level research question was *what to take into account when aligning service(s) with second-hand C2C?* This study examined one approach for aligning a service with C2C, focusing on the logistics and convenience related service. For this research question the different service types presented in the chapter 6.2 examine this further. Three service type approaches are presented to answer three different main seller needs. The important factors that should be taken account in this approach focused on the seller perspective, although the idea is that the solutions would be beneficial for other interest groups. There are a lot of references to indicate that C2C e-commerce and services should be linked together in more systematic and throughout way. The results state that in the specific area of research there are seller problems in getting rid of their used items. Also the principles of circular economy support the reference that there is need for the type of services that would create more efficient, better usage of the second-hand items. Although ten consumer interviews cannot cover the whole industry, their responds give signals that this services are needed in C2C environment. The positive economic impacts of circular economy, cost savings on better resource utilization, service dominant logic, and extreme popularity of C2C commerce are just some of the factors that indicate that there is a lot of opportunities to gain in this area of development.

The lower level questions together provide an answer to the main research question. It was set to *how to develop a consumer-oriented delivery service concept for C2C marketplace with lean startup principles?* This question is answered in detail throughout this study, and its different stages are also gathered in the 6.1 chapter. The results are discussed further in the following chapters especially from the perspective of main research problem.

7.2 Methodological Implications

The common usage of lean startup is in business development and startup projects. Adaptation to the academic research has required different emphasis in some parts in relation to the business environment. The key findings on utilizing lean startup in an academic research are collected in the Table 10. They are presented with a comparison to the utilization of lean startup in the business environment.

Table 10. Lean startup usage in business environment and academic research

	Business environment	Academic research
Objectives	profitable business	research problem
Requirements	business-related	academic
Principles	same: e.g. customer-centric, validated learning	
Methodology	Iterative, feed-back-loop, learning emphasis	
Speed	fast	slower
Resources	possibly higher	possibly lower
Level of Documentation	lower	high
Experiments	Real experiments based on hypotheses & 'get out of the building'	
Used tools	varying	
Analysis	fast, more superficial	more profound
Other inputs	Ideas & innovations	Theoretic

The objectives for utilizing lean startup in business environment and academic research can differ from each other. For business the objective is to create a profitable and sustainable business, whereas in academic research the research problem determines the objectives. The business environment and academic research objectives can however be close to each other, especially if a case company is involved in the academic research. In this research the process was connected with the case company, so the objectives were a combination of both the business environment and academic research objective. The requirements in business environment can also be different to those to an academic research. This is something to acknowledge when comparing the two environments and usage of lean startup.

The principles and methodology of lean startup should remain the same in any environment, even though the academic research and business environment might emphasize different things. The methods in lean startup should always follow the build-measure-learn feedback loop (Ries 2011). Lean startup assumes that the problem setting does not know who the customer is, so this should not be a problem for academic research, in case where it would not have a specific customer. The emphasis should always be on the target audience. In this study the lean startup principles were strictly followed.

Lean startup emphasizes the minimum usage of resources and especially time (Ries 2011; Blank 2013). However, the scientific requirements and available resources do not always support this what it comes to academic research. Such parts of the development process, as running the workshops and experiments, expect other people to be involved with the development process. The dedication of the case company, and the resource possibilities can vary in academic researches. Although lean startup is considered to be a fast method, it can require a lot of resources and dedication from other interest parties as well.

In order to produce scientifically reliable results all the factors effected on the results should be documented critically (Saaranen-Kauppinen & Puusniekka 2006). In this project all of the steps are documented in detail, which increases the time and resources spent on the lean startup process. In business environment the documentation level can also be high, but it does not necessarily require the same resources, depth, or accuracy as an academic research.

Lean startup requires real life experiments that base on the hypotheses and real customer feedback (Ries 2011). This can set some limitations for doing academic research with the methodology. In this research the workshop, meetings, and lot of the guidelines were done in collaboration between the case company representors and the researcher. The execution of the experiment was made by the case company, and some customer data for the interviews was received from them. The execution of lean startup therefore got a lot of impact from the case company. Utilizing lean startup requires a certain amount of commitment to the methodologies from the target company. In an academic study lean startup could have been harder to execute if the case company would not be familiar with the methodology or practices.

The tools used in lean startup vary between different companies, so there is not a directly recognized difference between the utilization of them in the two different environments. This study used the tools that were already familiar in the case company, and followed their ways of working.

Some parts in this research were analyzed in more throughout level than the lean startup methodology would actually require. Some areas could not be adopted as fast and resource-efficiently in a way that they would also fulfil the academic needs. For example consumer interviews and the analysis made based on them is not something that the lean startup methodology would acquire. On the other hand the “get out of the building” approach did not get the same emphasis than in the business adaptation of lean startup. In business environment the method produces more experiments and validated results faster than in this study. During the time used in the academic research, in business environment a lot more consumers could have been interviewed without the academic approach and its requirements. This had its impact on the focus of the resources during the work.

As a conclusion however utilizing lean startup in academic research can be extremely beneficial and give new perspectives to different areas of development. There are however a lot of industries and areas of development that lean startup likely could not be used. Lean startup emphasizes the customer approach instead of technical features, and it can work well for practically any project with similar approach. The evaluation of the usage of lean startup in an academic research is collected in the Table 11.

Table 11. *Evaluation of using lean startup in an academic research*

Using lean startup principles in an academic research (service development)	
Positive + Offers a different approach + Indicates errors early instead of hiding or denying them + Iterative method with real customer feedback + Faces the uncertainty + Flexible, enables creativity	Negative - Hard to make early stage plans - Adjustments to academic purposes (documentation, analysis, open to interpretations) - Might require a lot of resources
Evaluate or adjust: available resources, objectives & research problem, case company engagement, theoretic approach, tools	
When to use: + New product or service development + With extreme uncertainty + Case company with suitable organization culture (familiar with the methods or open for a new approach) + Ability to do experiments and approach customers directly	When not to use: - In problems where detailed technical solution is on the emphasis - When making (even early-stage) errors is too crucial - Case company with unsuitable organization culture - Lack of willingness to learn & admit mistakes

This framework is created based on the factors acknowledged by the usage of lean startup in this study. The first two sections present the positive and negative factors on utilizing lean startup in an academic service development project. In the middle it points out the important factors that have to be evaluated or adjusted when considering the usage of lean startup. The lower sections gather when to use, and when not to use lean startup methodology in an academic research.

Academically lean startup offers a very different perspective, it encourages to fail fast and learn from it. Most of the theoretical frameworks can be quite the opposite of this. Lean startup could work extremely well in academic research, as resource allocation, doing the right things, and serving the customer, are also extremely important aspects. It can be understood that science is always accurate and in that sense it does not fail. However in some areas of development, failing fast and learning from it could leave towards the right direction a lot faster, the same way as in business development.

7.3 Theoretical and Practical Implications

In the research the theoretical approach consisted of different elements. Adaptation of the theoretical references was not as straightforward since there is a lack of commonly accepted theories available in this specific development area of C2C logistics and services. Different theoretic approaches had to be combined and used among each other. A lot of the related theories support the significance of the topic, especially what it comes to the combination of services and C2C and new service development. Figure 55 summarizes the different theoretical findings in relation to the areas of the research focus.

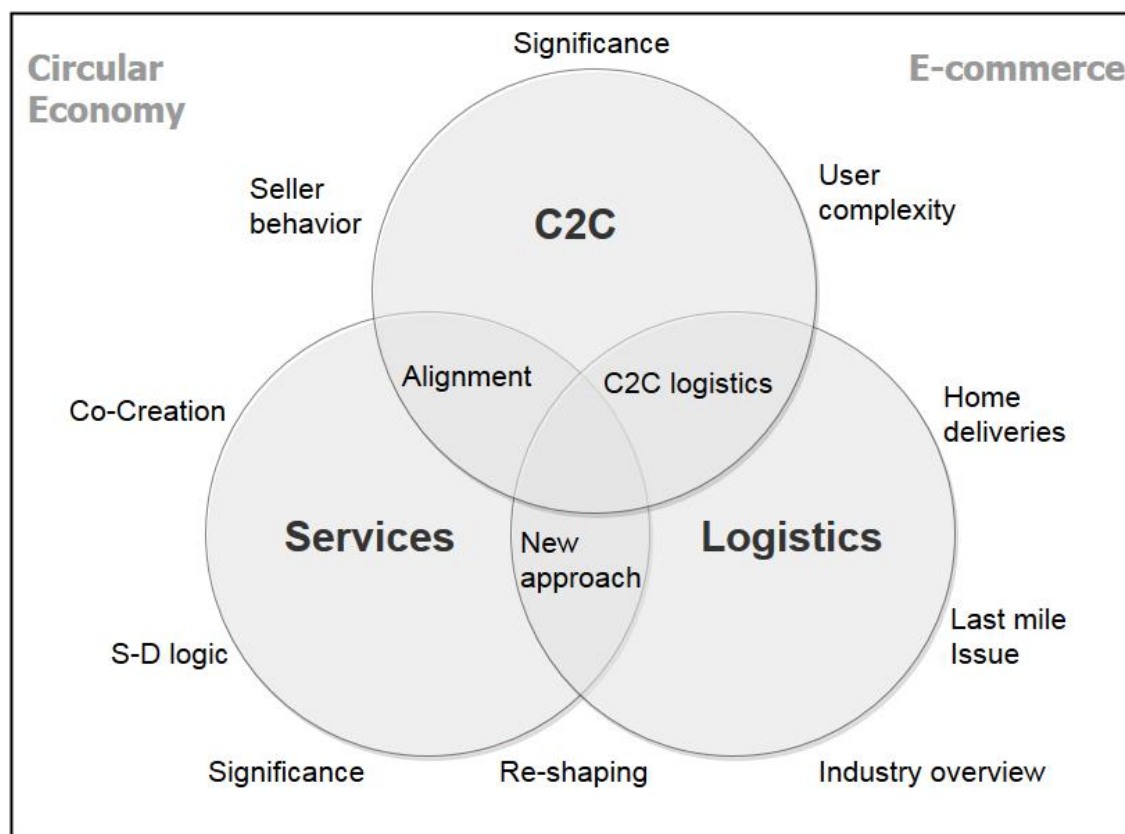


Figure 55. Findings and approaches of the key development areas

The elements in more general level were illustrated earlier (see Figure 1) when the focus of the study was presented. Figure 55 illustrates now how the development areas of C2C, logistics, and services were approached, and what findings they emphasize.

The key approaches of C2C were related to the seller behavior, significance of C2C, and complexity of the users. Seller behavior was the focus of the empirical research and consumer interviews, and eventually conducted different analyzed seller type overviews, based on the primary selling need (see Figure 52). The significance of C2C was emphasized in references and the operations of the case company confirmed this perspective. The complexity of the users was tackled by focusing into particular segment, Female & Fashion, and it was investigated deeper.

More and more consumers act as a seller in C2C marketplace and still the selling behavior has not been widely examined (Chu 2013). This study was able to understand the seller behavior better, and offer guidelines for a possible future research. As considering that hybrid consumers who do not belong to any specific customer segment are becoming more common (Ehrnrooth & Gronroos 2013), it cannot be assumed that one person follows always one particular behavioral pattern. This makes the setting more complex and for example the adaptation of the Figure 52 and the suggested service types is not as simple. Hybrid consuming refers to the buying behavior, so what this means for the selling behavior is also more unknown in the literature.

Different C2C logistics were presented in order to understand some of the current solutions. Otherwise logistics focus was on home deliveries, last mile issue, and general overview of the industry.

In logistics perspective the literature emphasizes how growing commerce requires new solutions for city logistics (see eg. Nykänen et al. 2015). Just providing an operational model is not enough as proper e-fulfilment strategies should be adopted to serve customers properly (Lee & Whang 2001). The approach presented here tackled the issue not by just finding a logistics solution, but to analyzing what type of service could solve the customer-needs. In this study therefore a new type of perspective to the logistics problem was utilized. The used approach initially was considering a logistics concept need, but was not restricted to be just about logistics. As the customer-oriented development process went further the emphasis on services became stronger. Different possibilities in the area of aligning services with C2C became more and more interesting question as the development went further. This research only presents an example for approaching this issue and the actual possibilities are probably a lot wider.

With home deliveries becoming more common the consumer logistics environment becomes more and more challenging. This supports the usage of lean startup, as resources should not be utilized to wasteful activities. For logistics the usage of lean often refers to lean manufacturing. However lean startup approach can be very suitable for a lot of logistics related settings. As the environment gets more competitive and challenging, focusing on the customer can be extremely beneficial, as the focus should be more on valuable activities. As lean startup assumes that the customers and their values are unknown, the valuable activities are considered as the ones that lead to learning what does the customer want (Ries 2011). In lot of cases would also be better to know what the customer really appreciates, and is willing to pay for, instead of just traditional optimization.

In consumer logistics and services, an important aspect is their re-shaping and the new approach to the development. A new approach to a logistics related service was presented in the lean startup process in this research. This approach is also in line with the significance of services, S-D logic (Vargo & Lusch 2004), co-creation, and the alignment of C2C and services. The circular economy and e-commerce principles were also important background influencers on the paper.

By combining these different areas of development, an entirely new approach was created. An intersection of the aspects, that were explained in this chapter and illustrated in the Figure 55, together form the key findings for the paper and the service development.

7.4 Evaluation of the Research

An important part of the validity and reliability of the research is to critically evaluate it (Saaranen-Kauppinen & Puusniekka 2006). The quality, validity, and reliability are something that should be evaluated throughout the research process (University of Jyväskylä 2011). In this process there are multiple factors to support the validity and reliability of the research. First of all, every part of the process is documented precisely and accurately. This does not leave room for hesitation on how were the results generated or what was made in the different parts of the research. Another important factor to support the validity and reliability is the used methodology that already itself questions everything along the way. In lean startup for example validated learning emphasizes that justifications should not be made without validated data. Therefore when lean startup principles were followed the process does not continue, before the best guesses are validated. Lean startup is not a method originally designed for academic purposes, which is why the academic guidelines were emphasized more than lean startup literature always required.

Regardless of that, some parts of lean startup have to be taken into consideration when evaluating the validity and reliability of the research. Although lean startup is widely accepted, it is relatively new and non-academic approach. Understanding the concepts and tools related to lean startup can vary. These areas are tackled on the previous chapter 7.2, where the lean startup methodology is evaluated on the business and academic usage. The insufficiencies of lean startup have therefore also taken into consideration during the research.

Lincoln & Guba (1985) present that four different criteria should be considered when evaluating the trustworthiness of a qualitative research. These factors are credibility, transferability, dependability, and confirmability. Credibility criteria refers to the reality and truth of the findings. Transferability evaluates how the findings have applicability in other contexts. Dependability shows that the findings are consistent and reproducible. Confirmability describes the level of neutrality of the findings, and evaluates the subjectivity and objectivity of the researcher. (Lincoln & Guba 1985)

Credibility in this research is supported by the prolonged engagement between the researcher and the participants. Another aspect supporting the credibility is the triangulation. Triangulation can involve the usage of different methods, or a wide range of informants. (Lincoln & Guba 1985; Shenton 2004) The process had phases that consist of different methods and data sources, both qualitative and quantitative. In literature review and utilization of the references, multiple sources were observed and used in order to get a wide scope. The sources utilized in the theoretic examination were mostly academic papers, articles, books, and publications. Also such sources as web pages, professional blogs, and private publications were used. The emphasis of the sources varied to some extent, as the academic approach was in some cases different to the

approach of the material focused for business purposes. This was taken into consideration when the references were utilized, and also all of their suitability for their purpose was evaluated.

The level of transferability is supported by the fact that the process and its different phases are documented extensively. There are some limitations that should be taken into account. In the project only ten interviews were made, which gives a deeper understanding on the seller needs, but does not really provide a wider overall understanding of the consumer behavior. In order to receive a more throughout understanding, more consumers should be interviewed. Also the fact that four out of these ten interviewees were early adopters should be taken into consideration. This type of sample probably therefore gave a more positive image to the setting in some levels, since these people had already expressed their interest. Therefore any justifications for wider consumer interest or generalization cannot be made just based on these interviews. This study describes the development process and the findings that arose during it. The approach for the development is very practical, and refers to a specific case. Therefore, if the findings are utilized elsewhere, their applicability should be considered.

The detailed level of documentation also supports the dependability of the research. The processes within the study should be reported in detail in order to address the dependability issues. (Shenton 2004). In this research the level of documentation is relatively accurate and all of the different steps are described in detail.

For the confirmability of the research the participation and objectivity of the researcher should be taken into consideration. The process outcomes and the direction of the development is very much effected by the researcher and other people involved, with their visions and opinions. Lean startup methodology aims to take these things into consideration and also works as an objective method for direct feedback. However for example in the consumer interview part the interpretations and analyses were made by the researcher, which can have an impact on the objectivity of the results. The analyses can be affected by the researchers own interpretations over the collected data. Pre-assumptions could have resulted on the analyses made, although the perspective was tried to remain as neutral as possible. From lean startup perspective this is however not the most critical problem, since validated learning would eventually eliminate the aspects that the customers do not want.

7.5 Recommendations for Further Research

Due to the limitations of the development project and lack of resources, the development process in this study did not get to a point where a proper service solution would have been implemented or discovered.

For further research in the case company the presented frameworks can be utilized in the development and in considering different possibilities. To obey the lean startup, the next stages of the development should continue with the build-measure-learn-feedback loop. More experimenting and learning is required, in order to validate the right direction for the service development. The focus of the research can follow some of the steps presented in this study, and it can utilize the frameworks presented based on the process. However as the lean startup process did not continue further strict guidelines cannot be presented here. To continue the process with lean startup principles, it is not possible to jump to the solutions or directly start to execute some of the ideas presented here.

As important as building and testing significant path to the customers from the early beginning is (Maurya 2012a), this particular case requires more interaction with them. The setting can for example be approached throughout the three different service types and adjust the customer-problem pair according to the selection.

This study presents one solution to approach this issue, but the recommendations are limited by some extent to a specific case. If the theories, models, or parts of the study would be utilized somewhere else, should be taken into consideration that this is attached and adopted to this specific case of research. This might have some limitations on some of the usage.

Based on the study for further research especially such areas as C2C seller behavior, and service utilization should be examined even further. They were the lower lever research questions in this study, but would require even larger focus to be understood better.

For lean startup as an academic method some guidelines are needed. This study collects some guidelines that came out during this project. The frameworks could be useful for the literature that lacks them, but also for the companies that are considering, or currently utilizing lean startup methodologies. There are a lot of tools, frameworks, and practices for using lean startup, but a scientifically valid established practices do not exist. As there are many ways to adapt the method, it should be considered when the method is being adopted to particular needs, and when it is used inappropriate way. The idea is not just use the terms and go mindlessly between the stages (Croll & Yoskovitz 2013), but to actually learn and acquire the principles and use them in a suitable way. This might indicate a need for more specific guidelines for the actual utilization and adaptation of lean startup.

REFERENCES

- Achrol, R.S. & Kotler, P., 2006. The Service Dominant Logic for Marketing - A Critique. In S. L. Vargo & R. F. Lusch, eds. *The service-dominant Logic of Marketing: Dialog, debate, and directions*. Armonk & London: M. E. Sharpe, pp. 320–333.
- Agarwal, R. et al., 2015. *The Handbook of Service Innovation*, London: Springer. Available at: <https://books.google.com/books?id=9wXyBwAAQBAJ&pgis=1> [Accessed October 16, 2015].
- Aized, T. & Srari, J.S., 2014. Hierarchical modelling of Last Mile logistic distribution system. *The International Journal of Advanced Manufacturing Technology*, 70(5-8), pp.1053–1061. Available at: <http://link.springer.com/10.1007/s00170-013-5349-3>.
- Amazon.com Inc., 2015. About Amazon. *Amazon.com*. Available at: https://www.amazon.com/p/feature/rzekmvyjojcp6uc?ref_=aa_nav_footer [Accessed January 18, 2016].
- Berry, L.L. et al., 2006. Creating New Markets Through Service Innovation. *MIT Sloan management review*, 47(2), pp.56–63. Available at: <http://urn.fi/URN:ISBN:978-952-249-369-9>.
- Bettencourt, L., 2010. *Service Innovation: How to Go from Customer Needs to Breakthrough Services*, McGraw Hill Professional. Available at: <https://books.google.com/books?id=RgVM54rvvj4C&pgis=1> [Accessed October 16, 2015].
- Birmingham, S., 2014. Three years of failing, three years of learning, three years of applying. *Pollenizer - Startup Science*. Available at: <http://www.pollenizer.com/failure-learning-sam-birmingham-startup-coach/> [Accessed January 10, 2016].
- Blank, S., 2013. Why the Lean Start Up Changes Everything. *Harvard Business Review*, 91(5), pp.63–72.
- Blank, S. & Dorf, B., 2012. *The Startup Owner's Manual: The Step-by-Step Guide for Building a Great Company*, Pescadero: K&S Ranch Press.
- Blank, S.G., 2007. *The Four Steps to the Epiphany* 3rd ed., Quad/Graphics.
- Blocket.se, 2015a. Blocket. Available at: <http://www.blocket.se/> [Accessed December 10, 2015].
- Blocket.se, 2015b. Blocketpaketet. Available at: <https://www.blocket.se/blocketpaketet/blocketpaketet.htm> [Accessed October 8, 2015].
- Bouwman, H., De Vos, H. & Haaker, T., 2008. *Mobile Service Innovation and Business Models*,
- Chapman, R.L., Soosay, C. & Kandampully, J., 2003. Innovation in logistic services and the new business model. *International Journal of Physical Distribution & Logistics Management*, 33(7), pp.630–650. Available at:

<http://www.emeraldinsight.com/doi/abs/10.1108/09600030310499295>.

- Chen, Z. & Dubinsky, A., 2003. A conceptual model of perceived customer value in e-commerce: A preliminary investigation. *Psychology & Marketing*. Available at: <http://onlinelibrary.wiley.com/doi/10.1002/mar.10076/full> [Accessed October 5, 2015].
- Chesbrough, H., 2010. *Open Services Innovation : Rethinking Your Business to Grow and Compete in a New Era* 2nd ed., San Francisco: Jossey-Bass. Available at: <http://site.ebrary.com/lib/ttyk/detail.action?docID=10441387> [Accessed October 20, 2015].
- Chesbrough, H.W., 2006. *Open Innovation: The New Imperative for Creating and Profiting from Technology*, Boston: Harvard Business School Publishing Corporation.
- Chu, H., 2013. A conceptual model of motivations for consumer resale on C2C websites. *The Service Industries Journal*, 33(15-16), pp.1527–1543.
- Circle Economy, 2015. Circle Economy. *Circle Economy*. Available at: <http://www.circle-economy.com/> [Accessed January 23, 2016].
- Cooper, A., 2004. *The Inmates are Running the Asylum: Why High-tech Products Drive Us Crazy and How to Restore the Sanity* 2nd ed., Sams.
- Cooper, B., 2014a. Customer Zoom Tool: Customer is the Source of Truth. Available at: <http://www.movestheneedle.com/customer-is-the-source-of-truth/> [Accessed October 12, 2015].
- Cooper, B., 2014b. Introducing the Lean Entrepreneur Experiment Map - Moves the Needle. Available at: <http://www.movestheneedle.com/lean-entrepreneur-experiment-map/> [Accessed October 15, 2015].
- Cooper, B. & Vlaskovits, P., 2013. *The Lean Entrepreneur: How Visionaries Create Products, Innovate with New Ventures, and Disrupt Markets*, New Jersey: John Wiley & Sons. Available at: <http://site.ebrary.com/lib/ttyk/reader.action?docID=10650972> [Accessed October 12, 2015].
- CoReorient Oy, 2015. Ride-sharing for goods - PiggyBaggy. Available at: <http://piggybaggy.com/en/#intro> [Accessed October 20, 2015].
- Craigslist, 2015. factsheet. *craigslist.org*. Available at: <https://www.craigslist.org/about/sites> [Accessed December 2, 2015].
- Croll, A. & Yoskovitz, B., 2013. *Lean Analytics: Use Data to Build a Better Startup Faster*, Available at: <https://books.google.com/books?hl=fi&lr=&id=VJS5qQWOKUIC&pgis=1> [Accessed October 8, 2015].
- Crook, J., 2016. Gone, The Service For Selling Your Old Junk, Goes Live In Seattle And The Bay Area. *TechCrunch*. Available at: http://techcrunch.com/2016/01/26/gone-the-service-for-selling-your-old-junk-goes-live-in-seattle-and-bay-area/?ncid=rss&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+Techcrunch+%28TechCrunch%29&utm_content=FaceBook&sr_share=facebook [Accessed January 27, 2016].

- Davis, F.W. & Manrodt, K.B., 1994. Service Logistics : An Introduction. *International Journal of Physical Distribution & Logistics Management*, 24(4), pp.59–68.
- Demangeot, C., Broderick, A.J. & Craig, C.S., 2015. Multicultural marketplaces D. Catherine Demangeot, Professor Aman, ed. *International Marketing Review*, 32(2), pp.118–140. Available at: <http://www.emeraldinsight.com/doi/full/10.1108/IMR-01-2015-0017> [Accessed January 22, 2016].
- eBay, 2016. Frequently Asked Questions. *eBay Valet*. Available at: <http://pages.ebay.com/sellforme/faq.html> [Accessed January 27, 2016].
- Ehrnrooth, H. & Gronroos, C., 2013. The hybrid consumer: exploring hybrid consumption behaviour. *Management Decision*, 51(9), pp.1793–1820. Available at: <http://www.emeraldinsight.com/journals.htm?issn=0025-1747&volume=51&issue=9&articleid=17098880&show=html>.
- Ellen MacArthur Foundation, 2015a. The Circular Economy Overview. *Circular Economy*. Available at: <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/environmental-audit-committee/growing-a-circular-economy/written/8745.pdf> [Accessed January 23, 2016].
- Ellen MacArthur Foundation, 2015b. *Towards a Circular Economy : Business Rationale for an Accelerated Transition*,
- Ellen MacArthur Foundation, 2013. *Towards the Circular Economy: Opportunities for the consumer goods sector*,
- Esper, T.L. et al., 2003. The last mile: an examination of effects of online retail delivery strategies on consumers. *Journal of Business Logistics*, 24(2), pp.177–203.
- European Commission, 2015a. Closing the loop: Commission adopts ambitious new Circular Economy Package to boost competitiveness, create jobs and generate sustainable growth. *European Commission - Press Release Database*. Available at: http://europa.eu/rapid/press-release_IP-15-6203_en.htm [Accessed January 23, 2016].
- European Commission, 2015b. European Commission - Fact Sheet, Circular Economy Package: Questions & Answers. *European Commission - Press Release Database*. Available at: http://europa.eu/rapid/press-release_MEMO-15-6204_en.htm [Accessed January 23, 2016].
- Flint, D.J. & Mentzer, J.T., 2006. Striving for Integrated Value Chain Management Given a Service-dominant Logic for Marketing. In S. L. Vargo & R. F. Lusch, eds. *The service-dominant Logic of Marketing: Dialog, debate, and directions*. Armonk & London: M. E. Sharpe, pp. 139–150.
- Foodora Finland Oy, 2015. Ruuan toimituspalvelu. *foodora*. Available at: <https://www.foodora.fi/> [Accessed January 18, 2016].
- Geamsakul, W., Matsuda, T. & Yoshida, T., 2006. Advances in Knowledge Discovery and Data Mining. *Advances in Knowledge Discovery and Data Mining*, 3918, pp.498–510. Available at: <http://link.springer.com/10.1007/11731139>.
- Goetschalckx, M., Vidal, C.J. & Dogan, K., 2002. Modeling and design of global logistics systems: A review of integrated strategic and tactical models and design algorithms. *European Journal of Operational Research*, 143(1), pp.1–18.

- Gone, 2016. Selling On Demand. *Gone*. Available at: <http://thegoneapp.com/> [Accessed January 27, 2016].
- Grönroos, C., 1998. *Nyt kilpaillaan palveluilla* 4th ed., Porvoo.
- Gustafsson, K. et al., 2006. *Retailing Logistics & Fresh Food Packaging: Managing Change in the Supply Chain*, London & Philadelphia: Kogan Page Limited.
- Helander, N. et al., 2013. *Avaimia asiakasläheisyyteen: Uudistuva verkostomainen palveluliiketoiminta*, Tampere: Tampere University Press - Juvenes Print.
- Hirsjärvi, S., Remes, P. & Sajavaara, P., 2007. *Tutki ja kirjoita* 13th ed., Keuruu: Otavan Kirjapaino Oy.
- Huet, E., 2015. App Battle: Who Does Food Delivery Best? *Forbes / Tech*. Available at: <http://www.forbes.com/sites/ellenhuet/2015/01/15/app-battle-who-does-food-delivery-best/#4bb19ffe7f3022e249af7f30> [Accessed January 18, 2016].
- Jaworski, B. & Kohli, A.K., 2006. Co-creating the Voice of the Customer. In S. L. Vargo & R. F. Lusch, eds. *The service-dominant Logic of Marketing: Dialog, debate, and directions*. Armonk & London, pp. 109–118.
- Jófogás.hu, 2015a. Apróhirdetés ingyen és biztonságosan. *Jófogás.hu*. Available at: <http://www.jofogas.hu/> [Accessed December 10, 2015].
- Jófogás.hu, 2015b. Házhozszállítás a Jófogással! *Jófogás.hu*. Available at: <http://docs.jofogas.hu/haztol-hazig/> [Accessed December 10, 2015].
- Jones, K. & Leonard, L.N.K., 2008. Trust in consumer-to-consumer electronic commerce. *Information & Management*, 45(2), pp.88–95. Available at: <http://www.sciencedirect.com/science/article/pii/S0378720608000025> [Accessed September 30, 2015].
- Kalakota, R. & Robinson, M., 2001. *E-business 2.0: Roadmap for Success*, New Jersey: Addison-Wesley.
- Kallionpää, E., Helander, N. & Rantala, J., 2015. Managing tomorrow's daily consumer goods logistics value network. *International Journal of Supply Chain and Operations*, 1(2), pp.201–218.
- Kerin, R.A., Hartley, S.W. & Rudelius, W., 2004. *Marketing: The Core*, Boston: McGraw Hill Professional.
- Lean Startup, 2015. The Lean Startup: Methodology. Available at: <http://theleanstartup.com/principles> [Accessed October 12, 2015].
- Lean Startup Machine Inc, 2015. Lean Startup Machine. Available at: <https://www.leanstartupmachine.com/> [Accessed January 13, 2016].
- LeanStack Inc, 2015. Raise Your Odds of Success — Lean Stack. Available at: <http://leanstack.com/> [Accessed November 4, 2015].
- Lee, H.L. & Whang, S., 2001. Winning the Last Mile of E-Commerce. *MIT Sloan management review*, 42, pp.54–62. Available at: <http://dialnet.unirioja.es/servlet/articulo?codigo=2376634&info=resumen&idioma=ENG>.
- Liebermann, Y. & Stashevsky, S., 2002. Perceived risks as barriers to Internet and e-commerce usage. *Qualitative Market Research: An International Journal*, 5(4),

- pp.291–300. Available at: <http://www.emeraldinsight.com/doi/full/10.1108/13522750210443245> [Accessed January 22, 2016].
- Liker, J.K., 2004. *The Toyota Way* 1st ed., McGraw Hill Education. Available at: <https://books.google.com/books?hl=fi&lr=&id=gaWCsozQpPIC&pgis=1> [Accessed January 20, 2016].
- Liker, J.K. & Morgan, J.M., 2006. The Toyota Way in Services: The Case of Lean Product Development. *Academy of Management Perspectives*, 20(2), pp.5–20.
- Lincoln, Y.S. & Guba, E.G., 1985. *Naturalistic Inquiry*, SAGE Publications.
- Löytänä, J. & Kortesoja, K., 2011. *Asiakaskokemus: Palvelubisneksestä kokemusbisnekseen*, Helsinki: Talentum.
- Mathe, H., 2012. Leading in service innovation: Three Perspectives on Customer Service Value Delivery. In C. Jaffeux, ed. *Essentials of Logistics & Management*. EPFL Press, pp. 115–134.
- Matkahuolto, 2015. Pakettien lähetysvaihtoehdot. *Matkahuolto pakettipalvelut*. Available at: <https://www.matkahuolto.fi/fi/pakettipalvelut/pakettien-lahetysvaihtoehdot/#.Vp329EZyTHs> [Accessed December 19, 2015].
- Maurya, A., 2015. No Problems in Your Business Model is a Problem. *Leanstack*. Available at: <http://leanstack.com/no-problems-in-your-business-model-is-a-problem/> [Accessed October 26, 2015].
- Maurya, A., 2012a. *Running Lean: Iterate from Plan A to a Plan That Works*, O'Reilly Media.
- Maurya, A., 2012b. Why Lean Canvas vs Business Model Canvas? *Leanstack*. Available at: <http://leanstack.com/why-lean-canvas/> [Accessed October 8, 2015].
- Meepetchdee, Y. & Shah, N., 2007. Logistical network design with robustness and complexity considerations. *International Journal of Physical Distribution & Logistics Management*, 37(3), pp.201–222. Available at: <http://www.emeraldinsight.com/doi/abs/10.1108/09600030710742425>.
- Moves The Needle LLC, 2014. Experiment Loop (All rights reserved).
- Murphy, P.R.J. & Wood, D.F., 2008. *Contemporary Logistics* 9th ed., New Jersey: Pearson Prentice Hall.
- Nykänen, L., Kallionpää, E. & Liimatainen, H., 2015. *Älykäs kaupunkilogistiikka – CityLog*, Tampere.
- O'Reilly, J., 2015a. Trends—August 2015. *Inbound Logistics*. Available at: <http://www.inboundlogistics.com/cms/article/trends-august-2015/> [Accessed January 18, 2016].
- O'Reilly, J., 2015b. Trends—July 2015. *Inbound Logistics*. Available at: <http://www.inboundlogistics.com/cms/article/trends-july-2015/> [Accessed January 18, 2016].
- Olsen, D., 2015. *The Lean Product Playbook: How to Innovate with Minimum Viable Products and Rapid Customer Feedback*, New Jersey: John Wiley & Sons. Available at: <http://library.books24x7.com/toc.aspx?bookid=82554> [Accessed

- October 12, 2015].
- Optimizely, 2015. A/B Testing. *Optimizely*. Available at: <https://www.optimizely.com/ab-testing/> [Accessed November 18, 2015].
- Osterwalder, A. & Pigneur, Y., 2010. *Business Model Generation*, Oxford University Press, 2016. Oxford Dictionaries. *Oxford Dictionaries*. Available at: <http://www.oxforddictionaries.com/> [Accessed January 19, 2016].
- Parcel2Go.com Ltd, 2016. Courier Services & Cheap Parcel Delivery. *Parcel2Go*. Available at: <https://www.parcel2go.com/> [Accessed January 5, 2016].
- Perez, S., 2014. eBay Launches “eBay Valet,” An iPhone App That Does The Selling For You. *TechCrunch*. Available at: <http://techcrunch.com/2014/06/17/eBay-launches-eBay-valet-an-iphone-app-that-does-the-selling-for-you/?ncid=rss> [Accessed January 27, 2016].
- Plouffe, C.R., 2008. Examining “pee-to-peer” (P2P) systems as consumer-to-consumer (C2C) exchange. *European Journal of Marketing*, 42(11/12), pp.1179–1202. Available at: <http://www.emeraldinsight.com/doi/full/10.1108/03090560810903637> [Accessed December 26, 2015].
- Posti Group Oyj, 2015. Kotimaan paketit. *Posti henkilöasiakkaille*. Available at: <http://www.posti.fi/henkiloasiakkaat/paketit/kotimaanpaketit/> [Accessed December 19, 2015].
- Punakivi, M., Yrjölä, H. & Holmström, J., 2001. Solving the last mile issue: reception box or delivery box? *International Journal of Physical Distribution & Logistics Management*, 31(6), pp.427–439.
- Ries, E., 2011. *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*, Crown Business.
- Rocket Internet, 2015. *Building out the Global Leadership in Online Takeaway*, Available at: <https://goo.gl/U1b92J>.
- Rushton, A., Croucher, P. & Baker, P., 2010. *The Handbook of Logistics and Distribution Management: Understanding the Supply Chain*,
- Saaranen-Kauppinen, A. & Puusniekka, A., 2006. KvaliMOTV - Menetelmäopetuksen tietovaranto. Available at: <http://www.fsd.uta.fi/menetelmaopetus/> [Accessed August 10, 2015].
- Sanoma Media Finland, 2015. Huutopaketti. *Huuto.net*. Available at: <http://www.huuto.net/ohjeet/ohje-huutopaketti> [Accessed October 20, 2015].
- Saunders, M., Lewis, P. & Thornhill, A., 2009. *Research Methods for Business Students* 5th ed., Harlow: Pearson Education Limited.
- Schibsted Media Group, 2014. About Schibsted. Available at: <http://www.schibsted.com/en/About-Schibsted/> [Accessed September 1, 2015].
- SCM Suomi Oy, 2015a. Tori.fi - Kaikille hyvät kaupat. *Tori.fi*. Available at: <http://www.tori.fi/> [Accessed October 19, 2015].
- SCM Suomi Oy, 2015b. Tori.fi - Suomen vilkkain kauppapaikka verkossa. Available at: <http://media.tori.fi/tori/> [Accessed August 15, 2015].

- Seo, Y. & Fam, K.-S., 2015. Researching Asian consumer culture in the global marketplace. *Qualitative Market Research: An International Journal*, 18(4), pp.386–390.
- Shenton, A., 2004. Strategies for Ensuring Trustworthiness in Qualitative Research Projects. *Education for information*, 22, pp.63–75.
- Simchi-Levi, D., Kaminsky, P. & Simchi-Levi, E., 2003. *Managing the Supply Chain*, Blacklick: McGraw-Hill Professional Publishing.
- Sipilä, J., 2003. *Palvelujen hinnoittelu*, Porvoo: WS Bookwell Oy.
- Sitra, 2015a. Kiertotalous on Suomelle 2,5 miljardin euron mahdollisuus. *Sitra - Kiertotalous*. Available at: <http://www.sitra.fi/ekologia/kiertotalous> [Accessed December 19, 2015].
- Sitra, 2015b. Käyttämättömät vaatteet kiertoon vaikka vieraan päällä | Sitra. *Sitra - Blogit*. Available at: <http://www.sitra.fi/blogi/kiertotalous/kayttamattomat-vaatteet-kiertoon-vaikka-vieraan-paalla> [Accessed December 10, 2015].
- Suomen Nettikirpputorit Oy, 2015. Miten palvelu toimii? *vahankaytetty.fi*. Available at: <http://vahankaytetty.fi/miten-palvelu-toimii/> [Accessed October 20, 2015].
- Suomen Osto- ja Logistiikkayhdistys LOGY ry, 2015. Verkkokauppa kasvaa tasaisesti. *Osto & Logistiikka*, p.7.
- Taniguchi, E. & Thompson, R.G., 2015. *City Logistics: Mapping The Future*, CRC Press. Available at: <http://library.books24x7.com/assetviewer.aspx?bookid=61721&chunkid=986909739> [Accessed January 19, 2016].
- Teece, D.J., 2010. Business Models, Business Strategy and Innovation. *Long Range Plann.*, 43(2--3), pp.172–194. Available at: <http://dx.doi.org/10.1016/j.lrp.2009.07.003>.
- The Federation of Finnish Commerce, 2016. Muodin vertaisverkkokauppa kasvaa erityisen nopeasti. *Kauppa.fi*. Available at: http://www.kauppa.fi/ajankohtaista/uutiset/muodin_vertaisverkkokauppa_kasvaa_erytisen_nopeasti_25408 [Accessed January 18, 2016].
- The Federation of Finnish Commerce, 2015. Vertaiskauppa verkossa - Marginaali-ilmiöstä ilmiöksi. *Kauppa.fi*. Available at: http://www.kauppa.fi/ajankohtaista/tiedotteet/suomalaisten_vertaisverkkokauppa_ylittaa_jo_kulutuksen_virossa_25318 [Accessed December 2, 2015].
- Tian, Y. et al., 2015. A practical model to predict the repeat purchasing pattern of consumers in the C2C e-commerce. *Electronic Commerce Research*, 15(4), pp.571–583. Available at: <http://link.springer.com/10.1007/s10660-015-9201-8>.
- TNS Gallup, The Federation of Finnish Commerce & Finnish DMA, 2014. Tavaroiden verkkokauppa kasvaa taantumasta huolimatta (Verkkokauppatilasto 2014). Available at: http://www.kauppa.fi/ajankohtaista/tiedotteet/tavaroiden_verkkokauppa_kasvaa_tantumasta_huolimatta_24784 [Accessed January 18, 2016].
- Tori.fi, 2015a. CASE: Tori.fi - Datalähtöistä kasvua. *SlideShare*. Available at: <http://www.slideshare.net/torifi/torifi-datalhtist-kasvua> [Accessed December 15,

- 2015].
- Tori.fi, 2015b. Tori.fi kasvoi 60 %. *Tori.fi Asiakaspalvelu*. Available at: <http://pressi.tori.fi/2015/02/> [Accessed January 19, 2016].
- Tori.fi, 2014. Torin vuosi 2013 numeroina. *SlideShare*. Available at: <http://www.slideshare.net/torifi/140205-tori-excelmediapakettiintoriteemallafinal-30889867> [Accessed January 19, 2016].
- Uber, 2015. Uber. Available at: <https://www.uber.com/> [Accessed October 20, 2015].
- United Parcel Service of America, 2013. UPS Palvelu- ja hinnasto-opas - Suomi. *Ups content centre*. Available at: www.ups.com/hinnasto/fi [Accessed January 19, 2016].
- University of Jyväskylä, 2011. Menetelmäpolkuja humanisteille. Available at: <https://koppa.jyu.fi/avoimet/hum/menetelmapolkuja> [Accessed August 10, 2015].
- uShip Inc, 2015. Craigslist Shipping - Pick Up & Delivery Service. *uShip.com*. Available at: <http://www.uship.com/craigslist/> [Accessed December 10, 2015].
- Wal-Mart Stores Inc., 2016. Walmart Corporate - We save people money so they can live better. *Walmart*. Available at: <http://corporate.walmart.com/> [Accessed January 18, 2016].
- Vargo, S.L. & Lusch, R.F., 2004. Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, 68(January), pp.1–17.
- Vargo, S.L. & Lusch, R.F., 2006. Service-dominant Logic: What It Is, What It Is Not, What It Might Be. In S. L. Vargo & R. F. Lusch, eds. *The service-dominant Logic of Marketing: Dialog, debate, and directions*. Armonk & London: M. E. Sharpe, pp. 43–56.
- Waste and Resources Action Programme, 2016. Sustainable Clothing Action Plan. *WRAP*. Available at: <http://www.wrap.org.uk/content/sustainable-clothing-action-plan-1> [Accessed January 23, 2016].
- Waste and Resources Action Programme, 2014. *Written evidence submitted by Wrap the Waste and Resources Action Programme*. Available at: <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/environmental-audit-committee/growing-a-circular-economy/written/8745.pdf>.
- Wolt Enterprises Oy, 2015. Wolt delivers for you. *Woltapp.com*. Available at: <https://woltapp.com/merchant.html#benefits> [Accessed January 18, 2016].
- Yuan, Z. et al., 2006. The Circular Economy: A New Development Strategy in China. *Journal of Industrial Ecology*, 10(1,2), pp.4–8. Available at: <http://0-search.proquest.com/pugwash.lib.warwick.ac.uk/docview/194919398?accountid=14888&nhttp://pugwash.lib.warwick.ac.uk:4550/resserv?genre=unknown&issn=10881980&title=Journal+of+Industrial+Ecology&volume=10&issue=1,2&date=2006-01-01&atitle=The+Circular>.
- Zhijun, F. & Nailing, Y., 2007. Putting a circular economy into practice in China. *Sustainability Science*, 2(1), pp.95–101.

APPENDIX 1: EARLY ADOPTER INTERVIEW SCRIPT – ENGLISH TRANSLATION

Marjaana Putro

4.12.2015

Interview Script

Objectives for the Interview

- To understand consumer needs related to the service. What features are considered meaningful?
- What are the most critical problems related to selling behavior in Tori? How about in more general level regarding to used/excess items?
→ What problems the pick-up service would actually solve? Are this problems critical (worth solving)?
- To understand the consumer behavior and confirm or disprove the previous assumptions better (e.g. leap of faith assumption: The user wants Tori to pick up multiple items at once)

Interview Contents

Presentation

Self-presentation and a brief description of the service

Pick-up Service

What kind of thoughts did the pick-up service add arose?

Why did you click it (what assumptions did you have at this point)?

For what types of situations do you need the pick-up service? For specific products? Why?

Do you want that the items are picked from your home? When (how fast/at what time)? (Why?) What problems are there considering this?

Do you want to create the selling ads to the system or do you want Tori to do that?

Do you want that the items are priced for you? Why (not)?

If the items are not being sold, do you want them to be delivered back to you?

Are you interested on knowing who Tori would sell the items picked up from you?

How much is a suitable price for the pick-up? (Why?)

Selling (in Tori)

What items do you usually sell in Tori? Why?

How do you currently deliver the item to the buyer (you deliver it, buyer picks up, it depends...)? Do you consider that this requires a lot of effort?

What is the most consuming activity related to the selling (of multiple products)?

How consuming do you consider the following aspects? Why?

Communication / Pricing&Selling ads / Delivering / Finding a buyer

Handling excess items (General level)

Do you usually have a lot of excess items? What items? Do you sell a big amount of them in Tori?

Where else do you sell/ What else do you do with them? What items? Why? (for example recycling the cheapest items since does not have time to price them)

What goals do you usually have for used stuff (get rid of it, make profit, something else)?

If we offer a pick-up service, do you sell more stuff in Tori? How about if it is priced/sold for you? What and why?

Background Information

Age, sex

How often do you sell in Tori? About how many items at once? Do you also buy?

Do you mainly use Tori with computer, tabloid or smart phone? If with the phone, do you use the mobile site or the mobile application?

Closure of the Call

The overview on the next steps, wrap-up of the call and thank you

APPENDIX 2: EARLY ADOPTER INTERVIEW SCRIPT – FINNISH ORIGINAL

Marjaana Putro

4.12.2015

Haastattelun käsikirjoitus

Tavoitteet haastattelulle

- Selvittää minkälaisia tarpeita noutopalveluun liittyy. Minkälaiset ominaisuudet koetaan tärkeiksi?
- Mitkä ongelmat ovat kriittisimpiä tavarain myynnissä Torissa? Entä yleisellä tasolla käytettyjen tavarain osalta?
→ Mitä kuluttajan ongelmia palvelu oikeasti ratkaisee? Ovatko nämä ongelmat kriittisiä (ns. ratkaisemisen arvoisia)?
- Ymmärtää kuluttajakäyttäytymistä sekä kumota tai vahvistaa aiempia oletuksia paremmin (mm. Leap of Faith assumption: Käyttäjä haluaa että Tori noutaa häneltä useat myytävät tavarat kerralla)

Haastattelun sisältö

Esittely

Esittely itsestä ja lyhyt kuvaus kaavailusta palvelusta.

Noutopalvelu

Minkälaisia ajatuksia mainos noutopalvelusta herätti? Miksi klikkasit ilmoitusta (mitä oletuksia sinulla oli tässä vaiheessa)?

Mihin käyttötarkoituksiin erityisesti tarvitset noutopalvelua? Mille tuotteille? Miksi?

Halutako että tavarat haetaan kotoasi? Koska (kuinka nopeasti noutopyynnöstä/ja mihin ajankohtaan?) (Miksi?) Mitä hankaluuksia tähän mielestäsi liittyy?

Haluaisitko itse syöttää ilmoitukset järjestelmään, vaan haluaisitko Torin tekävän sen?

Haluatko että tuotteet hinnoitellaan puolestasi? Miksi (et)?

Jos tavarasi eivät mene kaupaksi, haluaisitko, että ne toimitetaan sinulle takaisin?

Kiinnostaako sinua tietää, kenelle Tori myy sinulta noudetut tavarat?

Paljonko on sopiva hinta noutopalvelusta? (Miksi?)

Myynti Torissa(Ongelmat)

Mitä tuotteita yleensä myyt Torissa? Miksi?

Miten nykyään hoidat tavarain toimituksen ostajalle (vietkö, hakeeko ostaja, vaihtelee...)? Koetko tämän vaivalloiseksi?

Mikä osuus on mielestäsi myyntitapahtumassa vaivalloisinta (useimmat tuotteet)?

Miten vaivalloisiksi koet myyntitapahtuman seuraavat osa-alueet? Miksi?

Kommunikointi / Myynti-ilmoitukset (Hinnoittelu) / Toimitukset / Ostajan löytäminen

Ylimääräinen tavara ylipäänsä

Kertyykö sinulla paljon ylimääräistä tavaraa? Mitä tavaraa? Myytkö suuren osuuden käytetystä tavarasta Torissa?

Missä muualla myyt/Mitä muuta teet niille? Mille tavaroille? Miksi? (Esim. vien halvemmat käytetyt tavarat kierrätyskeskukseen, sillä en jaksu hinnoitella niitä)

Mitä tavoitteita sinulla on käytetyille tavaroille yleensä (päästä eroon, tehdä voittoa, jotain muuta)?

Myytkö enemmän tavaraa Torissa jos tavara haetaan kotioveltasi? Entä jos se hinnoitellaan/myydään puolestasi? Mitä ja miksi?

Taustatiedot

Ikä, Sukupuoli

Kuinka usein myyt Torissa? Kuinka paljon tavaraa kerralla? Ostatko myös?

Käytätkö Toria pääasiassa tietokoneella, tabletilla vai puhelimella? Jos puhelimella, käytätkö Torin sovellusta vai mobiilisivustoa?

Puhelun päättäminen

Kerro pääpiirteittäin mitä seuraavaksi tapahtuu, wrap-up ja kiitokset